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Research Report

Improving vocational competencies among graduates and youths: A chance for the future

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Improving vocational competencies among graduates and youths: A chance for the future



EUROPEAN INSTITUTE OF ROMANIA
SPOS Project 2009 – Strategy and Policy Studies

Study no. 4

**IMPROVING VOCATIONAL COMPETENCIES AMONG
GRADUATES AND YOUTHS: A CHANCE FOR THE
FUTURE**

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Bucharest
December 2009

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Foreword

The research - development program destined for the Strategy and Policy Studies – SPOS, launched by the European Institute of Romania in 2006 in order to support Romania in exerting its attributions as EU member state, has continued in 2009 through a new series of studies.

The topics approached have answered different requirements, of great interest from the perspective of the evolution of the Romanian economy and society, representing the result of both a consultation process as well as of national and European programmatic documents, and institutional requests, as they are perceived by representatives of the central administration present at the European affairs coordination meetings.

The studies provide founding elements for the main directions of action in order to bring to fulfillment some measures adopted at the European level (*Public finances: Introduction of a medium-term budgetary framework; The Future of the European Community's Resources and the Implications for Romania's Contribution to the EU Budget and The Impact of the Implementation of the Energy-climate Change Package on the Romanian Economy*), as well as perspectives of Romanian policies aiming to promote national reform measures in a European context (*Flexicurity and social dialogue in Romania– Perspectives on the implementation of flexicurity principles in Romanian undertakings and Improving vocational competencies among graduates and youths: A chance for the future*).

The current series of studies has benefited from contributions of a research team made up of:

Valentina Vasile, PhD in economics, Professor and senior researcher degree I, Scientific Director of The Institute of National Economy- Romanian Academy and associate professor at Petru Maior University of Tirgu Mures and Gas and Oil University of Ploiesti. She has a wide experience as researcher in economics. Also she is a well known specialist who participated in internal and international interdisciplinary research projects. Main topics of research: labour economics, migration, social policies, education, macroeconomics.

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Throughout the elaboration of the mentioned study, the research team has enjoyed the active support of Mihai Sebe as Project coordinator on behalf of the European Institute of Romania, as well as the support of a working group, consisting in representatives of the main central administration institutions with attributions in the field.

Gabriela Drăgan
Director General of the European Institute of Romania

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Valentina Vasile (coordinator) - executive summary, foreword, ch. 1, ch.2.1., 2.3., ch.3.3., ch.4.2., ch.5., ch.6

Gabriela Prelipcean – ch. 1.3., ch.2.2., ch. 4., ch. 6.4. (figure 4).

Daniel-Mihail Șandru – ch. 3.1., 3.2., 3.4

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We hope that our study is just a first step to a renewed approach of the education reform for all and for a whole active life, as a main pillar of successful implementation of the lifelong learning culture among labour force, in an inclusive and efficient perspective. This study could be a valuable support for political decision factors in their efforts towards implementing the new reform in education in Romania.

ACRONYMS

ACPART -	National Agency for Qualifications from Higher Education and Partnership with Economic and Social Bussiness Environment
AJOFM -	County Agency for Labour Force Employment
ANOFM -	National Agency for Labour Force Employment
AMIGO -	Households labour force survey
ARACIS -	The Romanian Agency for Quality Assurance in Higher Education
CCAC -	Comon Framework for Quality Assurance
RDI -	Research, Development and Innovation
EC -	European Committion
EQF -	European Qualification Framework
CEDEFOP -	European Centre for the Development of Vocational raining
CNCIS -	National Qualifications Framework for Higher Education
CNFPA -	National Council for Vocational Training
EFP -	Education and Professional Training
EQAR -	European Quality Assurance Register for Higher Education
EQA -	European Quality Assurance for Higher Education
FPC -	continual vocational training
FSE -	European Social Fund
IMM -	Small and medium entreprise
NIS -	National Institute of Statistics
ISCED	1-6 –level of education
Phare TVET -	vocational training reform project
GDP -	gross domestic product
PISA, PIRLS,	
TIMSS-	International evaluation system
SOPHRD -	Sectoral Operational Program Human Resources Development
PPS -	Standard purchasing power parity
ITC -	Information and Communication Technology
TEMPUS,	
ERASMUS/	
SOCRATES -	financing programs for education
SAM -	The Arts' and Trades' School
SECEFP -	European system of credits for education and training
SPOS -	Strategy and Policy Studies
SWOT -	Strengths, Weaknesses, Opportunities, and Threats

EU - European Union
UEFISCSU - Executive Unit for Higher Education and University
Research Financing

EXECUTIVE SUMMARY

Knowledge is the driving engine of ensuring economic growth and competencies the means for assuring the development of a performance labour market, of a labour force promoting education, research, innovation and creativity. Exit from the current crisis shall be based on more efficient use of resources in a new shift to sustainable, more intelligent and ecologic new market social economy where the main input for performance will be knowledge (EU 2020, 2009). The youths, the best prepared and easily adjustable active population segment, represent the human resource apt to be employed and have performance in the new created jobs. **The youths are the present and future of Europe and a rich source of dynamism within society** (Youth in Europe, 2009). **Swift insertion of graduates on the labour market and lifelong learning are key-elements for ensuring better transition to new jobs, specific to the knowledge-economy and between jobs and occupations, as well as for avoiding long-term unemployment which leads to human capital loss. Education becomes an obvious necessity for a productive and satisfying life contributing to the economic and social progress of the country and of the individuals** (Population Reference Bureau, 2009). **The market defines training needs and the quality of education is certified on the market by using/valuing knowledge, competencies and aptitudes.** New key-competencies are required for a new digital world, not only for gaining vocational and technical skills, but also for better insight about opportunities, challenges and even about the attitudes towards some ethical issues generated by the new technologies (Jan Figel, 2007, Key competences for lifelong learning)¹. The new European strategy for youths stipulates as main objectives on long-term: creating new opportunities for youths for education and on the labour market and promoting active citizenship, social inclusion and solidarity of all youths (new EU Youth Strategy for 2010 – 2018, 2009).

The present paper **“Improving vocational competencies among graduates and youths: a chance for the future”**, without being a

¹ Competencies are defined as a combination of knowledge, skills and attitudes adequate to a given context. Key-competencies are those required to all individuals for personal development and fulfilment, active citizenship, social inclusion and employment (Key competences for lifelong learning, European reference framework, Luxembourg: Office for Official Publications of the European Communities, 2007)

comprehensive approach of the field, is an addition to the thematic of the studies developed by European Institute of Romania in the last years about education and the issues of human resources and of the labour market, laying emphasis on the importance of coherence and interdependencies of policies on the education market and on the labour market. Education in its broad understanding, as permanent education is reaffirmed at international level as a fundamental necessity for development and individual welfare and as economic and social progress factor. **Education is acknowledged as useful to the society** through the activity developed by graduates on the labour market and, in their turn, business environment, social life and the level of human development are modelling the contents of education and of school curricula. **Education is an engine of business and social environment development** by means of performance on the labour market which, in fact, confirms the quality of learning, irrespective if formal, non-formal or informal. The crisis due to its particularities and magnitude becomes an incentive/factor of development, and investment in education the means/facilitator “with best performance on long-term” which does not guarantee economic turnaround, but generates also changes of essence in the social and human development, in the culture of active life.

The study is realised in a multi-disciplinary, legal, economic and educational approach and starts from a diagnosis of the training process for vocational competencies, highlights the extent to which current mechanisms, instruments and policies from the education field answer to current and future needs of the labour market, and the extent to which current practices at national/European level might contribute to bringing closer knowledge, competencies and skills demand and supply, under the conditions of increasing the dynamics of incorporating new technologies in production and daily life, of deepening the process of European integration and of globalisation. The study, in substantiating the measures’ and policies’ proposals, considers the coordination with *trends and directions at European level with respect to the development of vocational competencies* among graduates and youths: Youth Strategy–2010-2018, EU 2020 Strategy, Key competences for lifelong learning, European reference framework, 2007 etc.

1. The study, in its structure, presents the national **legal framework** in the field of vocational competencies training and development among graduates and youths highlights the particularities against the European

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system and the provisions of the Lisbon Strategy². An analysis is made about the impact of diploma and certificates recognition in the national system and the optimisation of national legislation. Finally, a critical presentation is made about the institutional system with a role in initial and continuing training with respect to the accrediting/authorisation conditions, to ensuring the education finalities (knowledge and competencies), the relationship with economic agents, the monitoring and control system, as well as the mechanisms of quality assurance. We may appreciate that Romania transposed legally and institutionally the relevant community law in the field of education and vocational training.

Based on the analysis of the vocational competencies training process in Romania, of adjusting the national system to the European requirements and taking into account the exigencies/challenges in the field, under the conditions of the new technologies and of the economic globalisation process, it is highlighted **to what extent the current system addresses the labour market, the present and future needs, and supports change and adjustment and maintains/preserves dysfunctions.**

Finally, the study considers the recent developments at legislative and institutional EU level and the fact that deepening the European integration process³ influences and even “shapes” the national systems of vocational competencies development, changing the approach perspectives of this process.

2. Another level of the **analysis** takes into account the coherence and compatibility degree between the education system as a whole (formal/informal/non-formal, public and private, etc.) and the requirements of **education and training on the labour market**. Starting with the identification of resources and of investments’ motivation in vocational

² The Lisbon Strategy (or Lisbon Agenda/Lisbon Process) represents a set of objectives, priority action fields, targets and measures for directing European policies of economic growth and employment towards achieving the strategic objective of the European Union of becoming the most competitive and dynamic knowledge-based economy. The Lisbon Strategy was adopted by the Extraordinary European Council from Lisbon, from 23-24 March 2000 and renewed by the European Council from Brussels from 22-23 March 2005. <http://www.mae.ro/index.php?unde=doc&id=34943>;
http://ec.europa.eu/growthandjobs/objectives/index_en.htm

³ In the preamble of the Treaty regarding the Functioning of the European Union is emphasised that chiefs of state and of government “determined to promote the development of the highest possible level of knowledge for their peoples through wide access to education and through its continuous updating”.

training and improvement on behalf of the stakeholders, the support/stimulating factors, and the risk factors are underpinned and suggestions are made for improving the permanent education system from the viewpoint of benefits they generate at economic, social, cultural level, etc. (economic performance, diminishing social risks, cultural development, etc.). The SWOT analyses for each lifelong learning sub-system (pre-university education, higher education and continuing vocational training) allow for highlighting some particularities, comparative advantages but also weak points in the legislative, institutional and training policies system and in the passage system of youths from the education market to the labour market.

3. Romania's particularities at European level and the gaps in the field of learning and of labour market presence on one hand, and the human capital potential on the other hand have represented the main parameters of defining and building-up the model proposed for an **integrated system of permanent education – modern, flexible, inclusive and of high performance, opened to labour market and active citizenship**. Less than half of the Romanian youths may be found in the education system at the age of 19 years (similar with Bulgaria, Austria, Sweden, United Kingdom and Croatia), while at European level the average is over 60%, women having a more significant presence in the education system of up to 10 pp (by the end of compulsory education, comparative situation with the one in Ireland and Island). The activity rate is much lower in Romania for youths aged between 15 to 29 years against the EU average, respectively under 50%, as compared with 58% in average at EU level in the year 2007 (situation similar to the one in Bulgaria, Czech Republic, Italy, Lithuania, Luxemburg, Hungary and Turkey), under the conditions in which countries like Denmark, the Netherlands, Island and Switzerland register activity rates among youths of over 70%⁴.

4. The performed analyses lead to a string of conclusions regarding the state and perspectives of the training systems of graduates for the labour market, the most significant ones being:

a) low and decreasing capacity of the education system to train young graduates performing on labour market

⁴ Youth in Europe, Eurostat, 2009

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The main **factors** influencing the reform of the national education system during the entire transition period and under its multiple aspects were:

- *the dynamic of the economy and structural changes*, preponderantly as answer reactions, of adjustment on medium-term to the demands of a still weakly performing market, volatility of economic growth and the lack of a long-term economic development coherence, of specialisation, and increased competitiveness on activities and branches;
- *demographic ageing* as result of decreased birth rate and migration, especially of young individuals;
- *the need of linking to the European Education Area and of assimilating the *acquis communautaire* in the field* ;
- *internationalisation of university education and implementing the Bologna Process* within a weakly performing educational system and much too less oriented towards future demand of the business environment and of the RDI system for promoting the excellence certified by the economic practice, and participation to fundamental and applicative research development.

The model of the young graduate of today is the outcome of an increasingly deteriorating educational system under the qualitative aspect of the educational act, of education's finality, particularly due to the weak or insufficient complex of competencies required by the business environment in the knowledge society. The education need and actual performance among youths remaining on the national labour market is the higher as Romania is facing on the globalised market with young states, from the demographic viewpoint and/or apt to attract highly qualified labour force (brain drain). **Nowadays the share of youths up to 15 years of age in total population is of 27% at world level, and of just 15% in Romania and at European level**, and of the elderly (persons aged 65 and over) of respectively 8% against 15% (in Romania and 16% at European level)⁵ . After 1992 the population segment aged 15-24 years decreases, and the trend shall continue for the following years, so that the cohorts of graduates shall be increasingly diminished and gradually smaller numbers of youth will enter on the labour market. Individuals' mobility and the lack of attractive jobs' supply after graduation feed the labour migration flows

⁵ <http://www.prb.org/Publications/Datasheets/2009/2009wpds.aspx>

leading to compressed dimensions of labour market entries, both under quantitative and particularly under qualitative aspect.

A stimulating factor for continuing training is represented by the accessibility of youths for the second faculty and the following, and the opportunity of parallel studies within several faculties and/or educational levels (university studies, second faculty and masters, etc.). The decision to continue studying is determined in several cases also by the difficulty of obtaining a job after graduating a secondary or tertiary education cycle and very often is chosen as an alternative to unemployment and as a way of increasing employment chances by gaining several qualifications or Unfortunatly formalism and low dynamics of adjusting curriculum to future needs of the labour market generate graduates with knowledge and competencies that are inadequate for the market.

b) non-performance youths employability

Labour market loses some labour force quality due to the lower cohorts of youth entering labour market and to international mobility of labour force (predominantly of the best trained graduates). As fields, the youths between 15-24 years are employed preponderantly in constructions, trade, hotels and restaurants, and those in the age group from 25-34 years in real estate and trade. In average, in the year 2007, 8.3% of the employed population was aged between 15-24 years and 27.1% aged between 25-34 years (in the case of women the shares are much lower, respectively 3.4% and 12.3%). For the same year, from total persons in the age group between 15-24 years 30.5% were active (24.4 employed and 6.1% unemployed) and 78.3% from those aged between 25-34 years (73.2% and respectively 5.1%). From total employed, youths represented fewer than 40%, respectively 7.7% with ages between 15-24 years and 30.8% between 25-34 years. From total employers 1% were aged up to 24 years and 14.9% were aged between 25-34 years. For self-employed the distribution on age groups was of 4.7% and, respectively 17.4% and for unpaid family workers of 18.4 and 23.2%. Men are more numerous on all socio-professional categories, partially justified also by the favourable lifetime of women to have children and hence their lower participation share on labour market.

If we analyse only the age group 15 to 24 years, on education levels, residence areas and genders, we find the following:

- Even though employed population increased, the number of youths aged between 15 –24 years who are employed diminished. Hence, the employment rate decreased against the year 2000 (35.7%) by 13 p.p., being of 22.7% at the level of the year 2007.

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- The lowest employment rates are recorded for youths with a low education level (lower secondary – 14.9%, primary or without graduated school – 17.8%), but also in the case of those with upper-secondary studies (21.2%). In their case the reason might be the continuation of studies on superior education levels for an important share of the respective education level. Another reason is the labour migration with employment in low skilled/unskilled activities in the member countries of EU not only (in agriculture, public catering, constructions, hotel services, housekeeping);
- The graduates of post upper-secondary and higher education record the highest employment rates (62.3 respectively 64.5%), and the evolution is positive in this case.

In the rural area, a sensible higher employment rate is recorded for youths with primary/without studies, lower-secondary and upper-secondary studies. This situation is explained firstly by the fact that in the rural area is provided the opportunity of employment in (paid or unpaid) activities developed in agriculture for persons with a lower qualification level. Closer rates on the two areas of residence (slightly in favour of the urban area) are recorded for the graduates of vocational education (1 p.p.) and post upper-secondary ones (over 3 p.p.). While the youths from the rural area with higher education continue to have an employment rate of over 3.3 p.p. higher as compared with the youths having the same education level from the urban area.

It should be noticed, also, that females have an employment rate about 30% lower as compared with males. Yet, the register an enrolment rate in higher upper-secondary, respectively higher education significantly higher than the one for males, a situation which explains the lower employment rate specific to them. Recent estimates (CEDEFOP, 2008) indicate that **until the year 2015, about 30% of all labour places shall require higher education, and almost 50% at least upper-secondary studies, and with a significant decrease of the jobs requiring low qualification levels.**

It should be mentioned that professional insertion of a graduate can be influenced by the school where he/she studied, the field of study, the economic environment in the region, the societies/companies where he/she performed practice stages or worked during studies, recruitment companies where he/she sustained interviews, conferences and trainings to which he/she participated. The guidance already during the upper-secondary

education of the young individuals towards vocational training and choice of faculty depending on the intended vocational profile for career development, correlated with the aptitudes and demand on the labour market leads inevitably to a higher employment rate of the graduates and low fluctuation in searching an “adequate/satisfying” job according to individual aspirations. As compared with the national average of the employment rate aged between 15 and 64 years, the employment rate of higher-education graduates is higher by about 29 pp.

Yet, with respect to the insertion rate of higher-education graduates this one is lower as compared with total youths who take a job, and particularly for the first year after graduation, due to the fact that an university graduate shall search longer and be more pretentious about the job, but also because of the legislation with respect to the minimum wage on economy, meaning that employers are not motivated to employ a higher education graduate because the level of the minimum wage is high (2 times until 2009 and 1.75 times more as of 2010 as compared with the minimum wage for an unskilled worker). Even though the state provides fiscal facilities for employing youths (for instance, the employer shall receive for 12 months the minimum wage on economy) due to the complementary conditions (including the obligation to remain with the respective job for at least 2 years) and of the high mobility of youths searching jobs according to their career aspirations, the share of making use of these facilities is very low.

As a trend, **on long-term, graduates of higher education have a higher safety of the job**. Another advantage is that compared with the productivity that they generate after their integration into activity they may be considered “relatively cheap” and, in addition, they are more flexible and easier to train on the job. Their major disadvantage is that on entry on the labour market they seldom are able to begin working effectively, requiring a period of training on the job, period which implies costs for the employer.

With respect to **registered unemployment**, it is found that the rate is lower among those with higher education (2.9% in 2007)/secondary (6.9%) and the highest is among those with low education levels (7.1%). During the period of crisis the share of young unemployed increases (particularly among males⁶), for instance the share of those with higher education reaching to about 4.6% in June 2009⁷.

⁶ Eurostat data indicate that 20.6% from the young male Romanians were unemployed in the period January-March 2009, against 18.6% in the same period of the year 2008. In the

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Young individuals in the age group 15-24 years are faced with the most considerable difficulties of professional insertion. They are more vulnerable, they enter easier into unemployment, particularly if they are fresh graduates or in the first years of their active life when they are still in search of a job according to their professional and personal aspirations or when, due to the reluctance of employers with respect to immediate adaptability and productivity on the job the latter prefer to employ persons with experience, to the detriment of the better educated but less or not at all trained for the active life. Hence, on one hand, the unemployment rate of the young persons under 25 years of age is about three times higher than the national average (2005 19.7%/7.2%, 2006 21.6%/8.2%, 2007 21.1%/7.2% and 2008 18.8%/6.7%), and the long-term unemployment rate reaches up to 10.5% (against 2005 of 13.1%, 2006 of 14.2%, and in 2007 of 13.3%).

The unemployment incidence is high, the share in total ILO unemployed of the young individuals with an unemployment period of 6 months and over is more than half, on decrease from 2/3 in 2005 (2005, 66.5%, 2006 67.4%, 2007 66.1%, 2008 56.3%)⁸.

The unemployment rate in the case of young persons aged 15-24 years from the urban area is by 8 p.p. higher than the one corresponding to young individuals in the rural area. The biggest differences on areas can be noticed for the persons with a low education level (without studies, primary or lower-secondary education) – by over 16 p.p. in favour of the population in the rural area. The differences on genders increased significantly, the unemployment rate for men being by almost 8 p.p. higher as compared with the one recorded for women.

The period of the financial crisis triggered a more marked increase of unemployed among young persons, but it should be noticed the low share of unemployed in total; by the half of the year 2009 was recorded an unemployment rate of the youths of 19.6%, in Spain, Latvia and Italy it was between 25 and 34%, and in Poland a bit about 18%.

The labour market, respectively the business environment shows more exigencies towards the young labour force entering the labour

case of the young females the rate increased from 17.5% in the first three months of the previous year to 18% in 2009.

⁷ According to EUROSTAT data, in the first quarter of 2009, the unemployment rate among youth in EU increased by 3.7 pp compared with the same period of the preceding year, under the conditions in which the general unemployment rate increased only by 1.2 pp (reaching 8.2%)

⁸ NIS, Romania in figures, Statistical guide 2009

market upon graduation. Young individuals find with difficulty a job adequate both from the professional and income viewpoint, a reason for which the fluctuation from employment to unemployment, and the reverse, as well as longer periods of unemployment are an important barometer of the reform of the lifelong learning system in Romania. In addition, the information about vocational training courses, or courses for adjusting to the job can offer information about the dysfunctions and correlation failures between the education system and labour market demand (unfortunately, such information are not systematically recorded and they can be currently obtained only by way of thematic statistical surveys)⁹.

c) *transition from school to active life – an important benchmark or the external efficiency of the education system.*

There are no systemic studies, nor a national data bank of monitoring socio-professional insertion of graduates on the labour market during the first years, by highlighting the dysfunctions of forecasting the educational content and, also, there is no adequate system of indicators that would allow an evaluation of the university system's impact on the Romanian economy and society¹⁰. There are only

⁹ Therefore, it is necessary that universities, by their representatives to provide much more information about the employment or continuing studies opportunities to their own students. We draw attention to the weak level of information that is provided by the universities about professional insertion. There are studies and tops, hierarchies of the higher education institutions from Romania realised by the Academic Society from Romania, the magazine Capital, the Coalition for Clean Universities, etc. Yet, the first to take into account only the opinion of the graduates and employers in measuring the confidence and satisfaction degree with respect to the educational supply is the study "University Ranking" realised by the German company Kienbaum Management Consultants in cooperation with the magazine Capital. The respondents have graded the universities with qualificatives, starting from 1 for very good, to 4, insufficient. The classification was made based on several criteria: theoretical education, practical orientation, language skills (foreign languages) and international experience. As result of these intermediary rankings the general ranking was realised. <http://www.capital.ro/articol/exclusiv-topul-universitatilor-din-romania-125346.html>

¹⁰ Order no. 6012/21.11.2008 for approving the Methodology and working instruments regarding the monitoring studies of labour market insertion of higher-education graduates from Romania <http://www.edu.ro/index.php/articles/11137>. The substantiation for the order was: 1. The necessity of monitoring the social-professional insertion of graduates; 2. The intention of the Ministry of Education, Research and Youth to enforce the methodology by means of a pilot project initiated through SOPHRD. The target group is represented by graduates of higher education institutions either public or private, at one and after five year since graduation, but only for the universities participating in the implementation of the study. The working instrument: questionnaire.

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fragmented studies, at the level of individual universities without any attempt of aggregating the results.

Young individuals entering on the labour market after graduating secondary or higher education live preponderantly in the urban area and men are more numerous; access to tertiary education is higher for those in the urban area, opportunities are closer to the beneficiary and often financial restrictions are the most important.

The diploma is still more important than competencies and proved knowledge, especially within the public sector. The business environment becomes gradually more rigid from this viewpoint and requests on employment professional certification by competencies, and in their absence the employment is made for a job requiring inferior training and/or the knowledge deficit is compensated through CVT on the job.

The relative high level of the young individuals' unemployment rate **highlights the necessity of a closer link between the education and training system and the labour market.** Finalising and applying the monitoring methodologies of insertion of the graduates of various education systems (vocational, upper-secondary, tertiary) is a priority, as well as developing more flexible and efficient systems of organising practice for pupils/students. Last but not least, a more careful analysis is to be expected about the competencies that employers in Romania regard as important for the success of their companies and adjusting the educational and training supply, along with periodical updating of employment and vocational training standards and of the educational curriculum in close dependency with the dynamic of changes on the labour market.

d) there is a significant numerical and structural gap between the education outcome for vocational training and the needs of the national labour market, heightened in some fields by the free movement of persons (attractiveness of some better paid jobs, not necessarily in the same training field) hence a considerable deficit of skilled personnel in fields such as constructions, industry, services, including health care, while on the European labour market our citizens deliver preponderantly low/unskilled jobs. Another reason leading to this situation is represented by the wrong perception about the usefulness of learning – the lack of importance given by the students and even some teachers to education they considering that success in life depends only on “connections”, on the ability of managing by any means and not on competencies, skills, talent, knowledge, etc. On the other hand, there is still the idea that in order to have a successful life, one must finalise an university, irrespective of what and

indifferent whether one learns something or not. The reasons are multiple, from “examples” of the transition period, to the deficiencies of the education system as a whole which is built on obsolete professional structures, where there is no, or lacking corresponding vocational guidance/counselling of the pupils/students depending on personal aptitudes and society’s needs. Hence, graduates emerge in large numbers for over-saturated fields and deficits are deepened in fields where they would be required. An example: in Bucharest, 60% of the schooling plan for the school year 2008-2009 was designed for the theoretical path, for a jobs’ segment on the labour market of 15 to 20%, while on the technological path and for the vocational school will learn 30% of the pupils for a jobs’ segment of 80% on the labour market. Save for exceptions, there is no practice in training labour force based on a schooling contract between educational units and economic agents or local councils, because there is not an adequate attractive legislative framework. Thus, also the number of higher education graduates (just as poorly structured on professions and competencies) pursues a distributional scheme on professions far from the demand of the labour market increasing, as a whole, but to different, volatile, shares. We notice, hence, the “contamination effect” according to which the candidate opts for a speciality depending on the wages’ level in the field, the advice of parents, “where most colleagues will attend”, more accessible specialities, etc., as no adequate information system is available to them, correlated with the economic and social development expectations.

e) *the curriculum, very often, is not correlated with the requirements on the labour market, is much too loaded and it does not take into account the idea of developing in students skills for continuing self-training, creativity, logical thinking, communication, team-work, which are comprised in the eight key-competencies determined by the European Union.* In the majority of Romanian schools still operates the old paradigm of learning by accumulation in order to graduate (teaching/dictating – *reproducing –forgetting*), a method replaced by the modern society with a more flexible one attempting students’ development of skills for continuing learning, based on practical understanding (on the principle I hear and forget, I see and remember, I do and understand). Modern concepts, such as digitalised curriculum, virtual libraries, are much to less present in the Romanian school organisation. The competencies which are expected by the society and labour market from students are hesitantly inserted in the evaluation process

f) Romania made some *progress in restructuring the continuing vocational training* system, registering an increase of participation to CVT

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courses from 0.9% in 1999 to 1.6 in 2004, to 1.3%¹¹ in 2005 and 1.5 in 2007. Without a specific law this type of education is realised relatively chaotically and ***there is no inter-ministerial coordination in order to create a performance cooperation networking the lifelong learning system and adult participation to education during work life.*** Market agents specialised to provide CVT are authorised for each of the courses, yet the duration of the training demand may be rather varied. In this context, the development of an action plan for supporting the increase of adult participation to learning is imposed as a necessary priority given the fact that we are far also from the inferior target proposed by Romania by the SCVT for 2010 of 7% (the European target for 2010 is 12.5%). By SOPHRD it is proposed to increase this percentage to 15% until 2013, even though the previous performances make difficult reaching this target (the European Commission proposes an average target of adults' participation to education for 2020 of only 2.5 percentage points higher than the one for 2010 that is to 15%). The increased exigencies pertain to the adult continuing training system, under the conditions in which almost one quarter of the youths aged 18-24 years leave school without any basic competencies and necessary skills to take a job¹². Important steps were made, for instance, for ensuring the second chance to education, or of extending guidance services, but there are still necessary diversification solutions of the training supply and of the initial education providers for adults, for a better adjustment to their particularities and learning needs and in order to be closer to market demand.

At the same time, companies are facing increasingly acute with the necessity of correlating the technological changes with the personnel training¹³. Even under the restrictive conditions of the current economic

¹¹ See "Report on the progress towards the Lisbon Objectives in Education and Training, Indicators and Targets, 2008" - SEC(2008) 2293, European Commission; Brussels (EUROSTAT data).

¹² Ministry of Labour, Family and Equality of Chances, <http://www.cdep.ro/interpel/2007/r3085B.pdf>

¹³ The CVT need was triggered mainly by the absorption of the technological and non-technological progress of the companies. The situation of the companies' dynamics from the viewpoint of technological changes is perceived differently depending on regions, fields of activity and enterprises' size. Per whole country, 42% of the companies' representatives believe that at the level of their own companies important changes took place in the last 5 years at technological and non-technological level. The most significant technological and organisational changes were recorded for large companies (with over 50 employees). (Continuing Vocational Training in the process of technological development within the

crisis, CVT remains an important factor of economic turnaround of the economic agents. Nevertheless, Romania registers *low investments of the companies in continuing vocational training/improvement* (only 0.3% in 2000¹⁴), as continuing learning of the labour force is regarded by companies more as an expenditure and less as sustainable investment with positive effects on medium- and long-term. Even if by the collective labour contract at national level is provided for the realisation of a Vocational Training Plan for Personnel and its implementation, practically, only a low number of companies (40.3% in 2005) provide CVT to their employees. The concern of enterprises to provide CVT to their employees is in reverse proportion to their size class. If 71% from the companies with 1000 employees and over provided CVT, from the small ones with 10-19 employees CVT was provided only by 10.7%.. Only 68.8% provided CVT through courses (external and internal) and 81.7% made use of other forms, respectively practical training, instruction or experience on the job, personnel rotation on different jobs, experience exchanges, far-training, etc.¹⁵ The participation rate to CVT was of 26.4% per total public entities (22% for persons under the age of 25), and of 32.3% for those in private entities (respectively, 35.6%)¹⁶. Even if the average period of the continuing vocational training increased in 2005 by 1.3 times as compared with 1999, the average period per participant was only half by then (44.1 hours against 72.7 hours) and 69.9% from the time allotted in this manner was developed within the working time.

Next to the supply of the companies, *the CVT services' system* is difficult to measure from the quantitative and qualitative viewpoint. The services' providers' are various from formal educational institutions to specialised economic agents and institutions of the civil society pertaining both to the public and the private environment. Educational institutions are focused on initial education, and the supply has a low level of

Romanian economy - REPORT –National Labour Force Employment and Vocational Training Observatory, Directorate for Programmes and Strategies of the Labour Force, Bucharest, April 2007
[http://209.85.129.132/search?q=cache:XV9qWjg5bH0J:www.mmuncii.ro/pub/imagemanager/images/file/Rapoarte-Studii/120407raport.pdf+ponderea salariatilor+la+formare+profesionala+continua&cd=1&hl=ro&ct=clnk&gl=ro](http://209.85.129.132/search?q=cache:XV9qWjg5bH0J:www.mmuncii.ro/pub/imagemanager/images/file/Rapoarte-Studii/120407raport.pdf+ponderea+salariatilor+la+formare+profesionala+continua&cd=1&hl=ro&ct=clnk&gl=ro)

¹⁴ Statistical Yearbook of Romania 2008, NIS.

¹⁵ Characteristics of the vocational training in Romanian enterprises, 2005, NIS, Bucharest, 2007.

¹⁶ Characteristics of the vocational training in Romanian enterprises, 2005, NIS, Bucharest, 2007.

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diversification and of adjustment to the necessities of adults and employers. At post-university level, the universities are focused rather on the supply of master and doctor courses and less on modular, flexible and punctual supply for improvement during the career. The institutions specialised in CVT services, as specific market operators are focused mainly on the provision of learning for vocational training/improvement, and *on the demand on short-term*, on knowledge updating, of gaining general and specific competencies and skills generated by the changes of the job contents. Because CVT must also provide the opportunity of swift adjustment to the continuously changing requirements of the labour market, *the diversification and increase of the vocational training supply quality* should be a permanent concern.

On insertion on the labour market, the graduates of initial training have **adjustment difficulties** to the working conditions. By and large, the skills obtained allow the graduates to exercise several jobs, but in order to be able to adjust to the requirements of a certain job/career they need to be **included in transition programmes from school to work**. The existing programmes do not support sufficiently the effective insertion of the graduates on the labour market, and “learning by doing” and career guidance does not answer to a satisfactory extent to the labour demand. In its turn, the CVT supply even though closer to actual demand is not enough developed and adjusted.

From the viewpoint of *transparency and accessibility* of information with respect to CVT supply and providers, we could state that important steps were made, such data bases being managed by CNFPA and ANOFM. Even CVT providers have their own data bases. Yet, **currently there isn't an integrated system, a network for managing a data basis** (statistical data and information), or systematic and integrating follow-up mechanisms of the training supply and demand at national, regional, local level, on trades, careers, professions and categories of knowledge and competencies, etc., so that at national level the real dimensions of the demand and supply of CVT services is not known, and neither their quality and efficiency, i.e. their impact. The statistical surveys about CVT of NIS, NALF (CALF) regarding the vocational training of unemployed, the statistics of authorising courses of the NCCVT as well as the documentation of each trainer do not provide a whole and coherent image. In addition, the institutions pertaining to some other structures (people's universities, NGOs, etc.) provide only sporadic and partial information, and the knowledge and competencies obtained in this way are not recognized save for the extent in which the

beneficiaries request their certification in one of the over 40 evaluation centres of vocational competencies currently existing.

The analysis of the current system of vocational training for the graduates entered on the labour market or in view of their insertion is supported within the existing regulation framework¹⁷ and by the increased interest of adults for using vocational training programmes, especially among young pre-skilled persons who prove more openness towards vocational reorientation.

Yet the system is lacking with respect to: flexibility and its capacity to answer to the continuing changing demand of the market, to developing/; adjusting the national qualifications' framework, and of the competencies' and skills' certification framework by the training providers within the continuing vocational training system; the weak adaptation of the continuing training **supply** to the requirements on employment and on the job; skills and competencies are not adequate enough to the needs of the labour market; the limited answer capacity of the continuing training system by authorised courses to the requirements of the labour market determined by the emergence of new careers due to the much too long period of developing career standards and far too complicated procedures.

The development of the national qualifications' framework, as well as of the certification framework for competencies and skills by the training providers within the continuing vocational training system, including here the certification of competencies in traditional trades would allow for the increase of youths participation to continuing training (for insertion on labour market for the skilled ones, and for continuing/certifying studies for those who abandoned schooling). The necessity/acceptance of the enterprises' need of change implies also adjustment, knowledge, competencies and skills updating, respectively correlation between the training needs of the personnel and technological changes, hence, adjustment also adjustment of the young graduates – **the current system of initial education does not anticipate the training needs of the labour market but follows them and often the inertia of change/lack of**

¹⁷ The Methodology for authorising vocational training suppliers of adults; the methodology of certifying vocational training of adults; The Qualifications' nomenclature for which programmes finalised with qualification certificates may be organised; The Evaluation and certification procedure for vocational competencies obtained by other ways than the formal ones, which regulates the evaluation and certification of competencies gained in a non-formal and informal manner.

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flexibility/adjustment triggers the CVT demand for (newly) entered youths on the labour market.

g) The lack of an integrating approach with respect to adult education (it is not provided for integrally into the distinct responsibilities' area of any ministry) and the absence of coherence and complementariness between the policies in the field of education, initial vocational training and continuing vocational training (as we already mentioned above) **delay the answer of the system to the demands on the labour market.** The youths exit the education system with a theoretical training and are faced with low mobility on the internal labour market with respect to completing the competencies deficit, particularly in the sectors with rapid development and in the new activity sectors/jobs. Therefore, more often than not the adjustment system of the youth is sustained mainly by training on the job and includes only minimal competencies for being able to act efficiently on the job.

As result, some dysfunctions were maintained, the lifelong learning system components' become increasingly closed in relationship with the connections and communication channels that should have existed between them, **and were oriented more on demand and compatibility with external markets than with the labour resources needs at national and/or local level.** The compatibility with EU requirements was pursued, and the external recognition of diplomas and qualifications, while internal coherence within the system at national level was forgotten.

Currently, **there are no open learning routes, alternatives of gaining knowledge/competencies within the formal/informal/non-formal system, permanent education is much too less oriented towards future needs of the labour market, and there are questions about diploma recognition particularly when the shift is made from one educational system to another** (from the informal system to the formal one, for instance), and **there are significant qualitative differences with respect to the outcomes of education, to the largest extent due to some non-updated/unadjusted to the needs/uncorrelated curricula with similar educational paths.** In addition, in general, **the quality of the education system decreased, including with respect to human resources within the education system.**

The measures of the last years related to reconsidering key-competencies, the finalisation of the TVET reform, the regulations within the sphere of adult education, acceptance of the necessity of promoting permanent education as a national priority, the changes in the education

evaluation system, etc. have generated converging evolutions towards a coherent and performance permanent education system, adjusted to the needs of the labour market and open to the future demand of knowledge and competencies at national and international level. The national qualifications' framework is developed, and the key-competencies are redefined in accordance with the ones at European level.

h) Under the conditions of the economic-financial crisis, investment in education and CVT is the lever for increasing flexibility and adjustability to the new challenges and partnership (central and local public authority, individuals, community, private environment) represent the support factor of new graduates in view of labour market insertion and identifying a job adequate to own professional aspirations. Even if this need is acknowledged at entity level, **the severe financial restrictions** and the drastic diminishment of the goods and services' demand make difficult, very often almost impossible on short-term the investment in human resources by education. Employment precariousness, the doubling of unemployment in less than one year and the perspective of a continuing increase up to 8.5% (more likely up to 10%) trigger more often adjustment behaviours (including temporary acceptance of wage diminishments or unpaid furlough) than resources' advancement for vocational training/improvement the outcomes of which might turn into productivity, wage incomes and/or profit on medium-term.

5. Currently, Romania has no well-outlined strategy about human capital, **integrating learning paths** (educational sub-systems) and credibly anchored in the European area, nor a coherent and efficient/performance institutional framework. **The partial efficiency of the sub-systems does not replace the need of an integrated system and of some coherent and converging policies for education's finality, respectively training youths for the labour market.** There are on the way of completion some strategies which consider the components of lifelong learning, or which shall be enforced only as of 2013-2020. In addition, statistical data and performed analyses at the level of the Romanian educational system, respectively comparisons with other European countries prove the weak performance in implementing existing strategies.

The study proposes and presents schematically, an integrated system of permanent education for labour market and development of active citizenship – modern, flexible, inclusive and of high performance.

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5.1. The main support pillars consider:

a) **the factors influencing the labour market in the next 10 to 15 years and which refer to: technological progress; the demographic factor; economic globalisation** (Károly and Panis, 2004)¹⁸. These forces shall restructure both demand and supply of labour force, and as well influence the changes in the way individuals shall work with direct consequences on the educational system. In the case of technical education, for instance, in one of the five disciplines the knowledge level is changed in less than one year (Bundesministerium für Wirtschaft und Technologie and Bundesministerium für Bildung und Forschung, 2002). Similar developments are encountered also for other disciplines, which mean that also the performance of the education system shall presuppose mobility and anticipation capacity of the knowledge and competencies' needs on the labour market.

b) The European forecasts about the competencies and skills needs that should be held by European workers in order to remain competitive in the knowledge-based economy estimate that, until 2015, **European economies shall aim towards knowledge-based sectors that will require superior skills** in a share of about 30% from total jobs.

c) **The increased perisability, respectively the relatively short life-cycle of knowledge and competencies which lead to the permanent need of the systems (pre-university, university and CVT) of being predictable and compatible with the demand of employers.** The lack of answer or delayed answer shall lead to slowing-down the absorption of RDI outcomes (both of technological innovation, and of the non-technological one), and hence to increased gaps against the other EU member countries.

The expected finality is represented by the efficient employment of youths on the labour market and promoting active citizenship, which presupposes at least the following:

- **Compatibility between labour market demand and the supply of the educational system**, as support for the more swift insertion of young graduates on the labour market;
- **putting to good use the potential of knowledge, competencies, skills/aptitudes gained within education (initial and continuing)** on the job by delivering productivity and quality to the employer;

¹⁸ A relevant work in this regard, having as purpose the information of decision makers about the issues regarding education, training and other specific elements of the labour market is Lynn A. KAROLY, *The 21st Century at Work. Forces Shaping the Future Workforce and Workplace in the United States*, RAND CORPORATION, 2004.

- **Flexibility and adjustability on the labour market**, an operative and innovative answer to the challenges of the business and social environment dynamics – technological progress absorption, orientation towards the “low carbon economy”, management of economic cycles, diminishment of the economic and financial crisis effects.

Permanent education for work generates a positive impact on the society, realising superior benefits to gains at individual level by positive externalities on medium- and long-term. The benefits are distributed within society along the following routes/channels:

- a) **economic.** The impact of education on labour market is the most significant and generates triggering effects: increases labour performance, heightens the capacity of generating and using technological and non-technological progress, the economic environment becomes more creative, the dynamic of renewing the supply of goods and services increases just as their quality, and the business environment is permanently stimulated as competitiveness creates new needs of education and innovation. Labour force, particularly young graduates are flexible to change, even generate it and are more innovative in finding new solutions, methods, instruments, procedures for realising the general objective of each business/activity – satisfying a need;
- b) **of promoting policies.** Technological progress and knowledge-society generate the need of high performance experts with critical thinking, communication competencies, and involvement in the implementation and evaluation of measures, policies, strategies;
- c) **social inclusion.** Permanent education for labour market increases employment chances ensures equality of opportunities restricts and even hinders the promotion of any kind of discrimination for employment and participation to the society life. The increased opportunity for employment reduces/eliminates the threat of poverty (the poverty rate of those aged between 16 to 24 years is of 21% in the year 2007, with 4 pp lower than the national average, Eurostat data), and is a factor of welfare and human development, and an instrument of changing culture, including work culture;
- d) **diminishment of labour migration and of brain drain flows.** Adjusting learning to local and national needs and creating career-wise attractive and remunerative jobs stabilises the labour

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force through the opportunities of career performance, career development and financial comfort required at the beginning of the road – setting up a family, the purchase of mobile and real estate goods, financing cultural and recreational consumption, etc. The investment in education is returned within the national economic system generating resources for better financing of lifelong learning for present and future generations;

- e) **active citizenship.** Education for participating to satisfying the economic, social internal (and international) cultural demand creates the premises of extending the active involvement also outside the workplace, to promoting the principles of active citizenship, and hence gaining considerable public benefits even though difficult to commensurate;
- f) **international cooperation.** Gaining key-knowledge and competencies, common at European level and closing the technological gap on one hand, and the Bologna Process, the Lisbon Agenda and the setting up of the European Research Area on the other hand lead to cooperation and acceptance of multiculturalism.

The aforementioned effects bring significant non-material benefits, develop a new culture of learning and of active life, and to a certain extent prepare the labour force for a globalised economy, competitive, training demand intensive, and generate specific competencies to the knowledge-economy.

The benefits of education on labour market may be measured by *impact indicators*, such as:

- *marginal increase of the individual wage based on increasing the average period of schooling.* Recent researches suggest that in Europe as a whole, one additional year of schooling increases the level of the individual wage by approximately 6.5% and up to 9% in countries with less rigid wage structures. In the close, positive connection between education and wage, college education represents a threshold from which any additional type of education brings along a special reward (Education at a glance, OECD, 2002.)
- *unemployment diminishment.* Records have shown, also that the unemployment rate decreases together with the levels of higher-education, these diminishing the involved social costs. It is obvious that the employment rate increases with the reached

education level (Eurostat, Survey on labour force, quoted in the Action Plan on Skills and Mobility, Commission Communication COM(2002) 72).

- *Increasing profitability.* Comparing the estimated rates of the benefit for the different stages of the education system, it results that college education turns into the basic level for the knowledge economy education. It is obvious that the period (and hence costs) of the unemployment periods decrease substantially, with the extension of schooling from secondary education to college (Training and Learning for Competence., CEDEFOP; 2001).

5.2. The facilitating system of education for labour market is supported by the European Framework of Lifelong Learning – **a national model** - that should have as *basic coordinates* the public-private partnership and the promotion of RDI outcomes. The **Restrictions** of a national model of education for the labour market consider, on one hand, the impact of demographic ageing and educational gaps as compared with the European area, and on the other hand the economic development level and the impact of the economic and financial crisis. **The facilitating instrument is represented by the consistent and sustained investment in education, from multiple sources and with the participation of all interested partners – including beneficiaries.** The approach of the investment through the prism of efficiently and economically use presupposes the promotion of an **early prevention strategy** (school guidance and counselling), apt to diminish significantly correlation failures between education and training and the requirements of the labour market, to increase the share of those finalising their studies, and to ease transition to the labour market, but also to facilitate return to studies. The still unsolved issue within the education system for labour market remains the one of permissiveness of the educational path development by open learning routes that would facilitate professional mobility, time savings for completion/improvement education with respect to competencies, and saving financial resources for education.

In this context in which **traditional education institutions become co-partners in promoting continuing learning, the reform of the educational system meaning the creation of a permissive environment for flexibility, adaptability, and continuous reform under the conditions of generating and incorporating innovativeness turns into a necessity, a priority, a condition of current and future certification of the quality of learning.** The responsibility of learning efficiency pertains to all forms of education, with respect to rendering compatible the outcome of

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learning (knowledge, competencies, skills) with the demand of the labour market under the conditions of promoting equity¹⁹, access²⁰, quality and financing.

Quality in education is increasingly more a dependent variable of actuality and efficiency, meaning that it assumes, among others: a curricula adjusted permanently to the requirements of the labour market, and in accordance with the economic-social and cultural (fields of science, knowledge, competencies, etc.) development trends; optimum periods of the learning periods correlated with the need and volume of theoretical knowledge and practical aptitudes/skills; promoting learning abilities and self-learning to the detriment of gross accumulation of knowledge, gaining practical skills, useful on the labour market.

Financing presupposes the mix of sources (public, private, personal etc. and establishing the costs per beneficiary, depending on the specifics of learning and resource needs (material and human). The total allocations for education are difficult to determine because during the transition period more and more young individuals opt for continuing studies – university studies at one or more faculties, masters, doctor, post-university, and the number of “tax” places exceeds in many higher education institutions the one financed by the state budget. Even though the cost of education increased permanently, we cannot state that also the quality followed the same dynamic, but to the contrary, the gap between the supply of the education system and the demand on labour market in various fields continued to deepen. Continuing learning, after the initial education system attenuates somewhat the differences between the demand and supply on labour market with respect to labour contents – knowledge, competencies, skills, yet this segment of learning addresses mainly the current needs and only to a small extent future ones, the availability of learning for benefits on medium- and long-term being adjusted in the case of youths by the lack of financing resources for education and the stringent need of earning incomes from labour for ensuring daily living support. As contrary to other countries, the part-time work system for full-time students is less developed (despite the increase in the last years), partially also due to some factors such as: tradition of living with the parents during schooling, the difficulty of finding houses and afford the maintenance costs from part-time jobs during the

¹⁹ Equity considers ensuring education for all socio-economic categories of population at all levels, including higher-education.

²⁰ Access refers to ensuring the equality of changes on enrolment in one education form, without discrimination on various criteria.

years of studying, particularly in the large towns of Romania, the weak supply of the business environment of flexible-time jobs, the absence of fiscal incentives for the employment of young graduates, or of those integrated in one secondary/tertiary education form, etc. The analysis of the structure of households' expenditures indicate an increased concern of families for expenditures allotted to education – gratuity of compulsory education presupposes completion costs (special handbooks, collections of problems, tuition hours, common and special requisites, PC and office accessories, etc.) and these costs increase while progressing in secondary and thereafter tertiary education.

Closing the gap between the supply of the educational system and the demand on labour market increases the role of vocational, technical-applicative education, changes the profile and structure of the knowledge, competencies and skills demand. Issuance of qualification certificates within secondary education and, recently, also in tertiary education the granting of competencies' certificates represent a clear orientation towards the requirements of the labour market, yet the **actual content of training very often is much less adequate to the qualification and/or competencies requirements of the market.** *School remains, in many respects, behind the needs on the labour market, and the quasi-total absence of cooperation during the educational process between school and the business environment significant generates additional costs and extra time for the practical component of learning, born by the individual and/or employers. Hence also the reluctance towards recruiting young graduates who have knowledge but much fewer work competencies/skills* and who did not learn how to put to good use the accumulated knowledge. School, meaning the traditional one, during compulsory education remains still far from career and life, and young graduates enter on the labour market unprepared, with career and income expectations that during the first years of active life are provided only as an exception.

In the attempt of developing the knowledge-based society, vocational training and post-secondary technical education, next to higher education have a particular importance. It should be mentioned, still, that a performance and quality generating reform between these components/educational stages presupposes also **changes of substance in the contents of the compulsory education curricula.** Gaining, already in this stage, the literacy and arithmetical skills should be completed with practical skills of managing within the modern society, of making use of the ITC products/services', of communicating, participating, according to age and possibilities to the life of the community.

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Innovation, either technological or non-technological, absorbed by the economic and social environment presupposes practical knowledge and skills that should be assured by the educational system. Post-secondary technical education may answer to the competencies needs for using technologies and methods of activity's organisation, and the university one to generating new knowledge and scientific progress. Increasing the sophistication degree of technologies generated the need of highly qualified technicians that interpose between highly-skilled workers and diploma engineers, the training profile and curricular area of whom are closer to the practical needs of economic agents (Mazeran and others 2007). This is what in our system is represented by vocational and upper-secondary education.

The growing importance of competitiveness in the current century and the acknowledgement of the comparative advantages from using on labour market a qualified personnel, associated with the economic-social reform from the transition countries and not only, increased the interest of youths for education. After the "dual" German model of education for labour market of the 19th century²¹ and the one of the Asian tigers who associated the economic growth strategy with the encouragement of technological education by both public and private education system²², nowadays globalisation and trade liberalisation generate the need of competitive and flexible companies with highly-skilled personnel. **Thus, the interest for exact sciences, for cutting edge research and non-invasive, low carbon technologies increased.**

Even though the cost of education increases, it remains the most efficient and viable solution on medium- and long-term for

²¹ In fact, it is about a combination between the English liberal model (where the content of technological education was negotiated between the employer, trade unions and provider of training and which answered mainly to market needs) and the centralised French model (according to which the organisation of the learning process and the contents of training was established by the government after consultations with the employers' organisation and trade unions and was financially supported by companies through a specific taxation system). The German model considered the stability of the training contents, jointly agreed on by government, employers' organisations and trade unions, the courses presupposing both theoretical and practical training (Mazeran and others 2007).

²² The role of the government in this case was to establish rules regarding the quality of education and gaining through courses well-defined competencies, in fact emphasis was laid on specialisation for supporting the development of a particular field (steel production or shipbuilding, for instance). Through this education system was ensured the necessary skilled personnel of the economy, without creating pressure for superior education forms (UNESCO 2005).

diminishing/preventing poverty and for promoting social inclusion.

Additionally, as compared with school education (either public or private), CVT courses provided by the company are more efficient. Irrespective of the chosen education form, more efficient is the one addressing the employment needs of the employers and answer to a larger extent to the job content of the newly created workplaces.

A permanently debated issue remains the controversy **specialisation versus general education** in upper-secondary and tertiary education. On one hand strong specialisation and diversification require costly teaching support but provide for well-defined competencies which, if answering to the labour market demand, prove to be cost-saving. On the other hand, wider specialisation but associated with innovativeness, flexibility and participation might diminish the reply speed of the company to the dynamics of the goods and services market.

If the **partnership** in promoting education seems to be currently the way towards competitive advantages on the market associated with performance and remunerative employment (financially and also opportunity for career development), it should also be apparent in defining the educational act (here it is also associated with RDI and turning into the triad education-research-production) and in the expected finalities (key and specific knowledge and competencies), as well as under the aspect of financing (stat, business environment, civil society, individual co-participation). In fact, **the investment in education might generate/maintain/develop competitive advantages and, under situations of crisis, supports change and economic turnaround.**

As different from pre-university education which is focused on labour market competencies and knowledge for opportunities' creation for access to a superior performance education level, tertiary education related to the requirements of the labour market presupposes: a) strategic and relevant orientation of the curricula on fields of science; b) responsibility in defining the contents of learning for compatibility with the requirements of labour market on medium- and long-term; c) efficient financing oriented on the learning outcomes' quality; d) RDI promotion and cooperation in knowledge development: interdisciplinarity, networks, partnership, complementariness.

Higher education the more remote according to outcomes and educational profile from the requirements of the national labour market, the more shall generate graduates that will migrate on other markets – brain drain – or who will undergo vocational reorientation. *The strategic orientation of tertiary education assures the need of knowledge and*

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competencies for facilitating the absorption of high-tech and development of new fields of knowledge. **The systemic approach of policies** in the field of tertiary education represents perhaps the most adequate way on one hand for answering the challenges generated by the intensive need of knowledge for maintaining economic competitiveness and on the other hand for it may constitute an active and increasingly significant component of the national innovation system. The knowledge gained through education are heightened by the participation of students, masters and doctor students to RDI activities within the institutional framework or on the research networks in cooperation with research institutes and the business environment. The young individuals gather top knowledge and in their turn generate knowledge and applicability in the economic, social or cultural environment determining the need for new skills and competencies on the labour market for the newly created workplaces by applying the RDI outcomes.

The development of human resources and training of human capital represent factors of growth for the competitive advantages, and the strategic approach of higher education means at least: a) curricula development on the principle of anticipating/generating future needs of work knowledge and competencies; b) involvement in determining the education needs of all stakeholders, including the private environment and civil society; c) ensuring transparency and promoting accountability²³; d) performance management and quality control, including by labour market indicators – employment, incomes, performance through quantifiable outcomes, career development dynamics; e) increasing answer/flexibility capacity and speed to the changed circumstances and to innovative initiatives for valuing the development opportunities, etc. In this manner, **a better correlation is ensured between education, labour market policies, productivity and competitiveness on the goods and services market. The graduates integrated on the labour market have the capacity to promote technologically intensive activities that create significantly higher value added.**

²³ Accountability is a relatively recent concept, developed at the brink between the millennia which includes a mix of market ideology, democracy and increasing competition for public resources. In the field of education is appreciated according to the relevance with respect to the needs of the society and of the individual/graduate. As mechanisms of accountability in education we may remind: certification, academic audit, quality evaluation, accreditation, verification tests and examinations.

5.3. Stakeholders in the system of education for the labour market

The market stakeholders involved in the education system for labour market include: educational institutions, market operators for continuing training, employers, beneficiaries, etc

The labour market needs labour force with an adequate knowledge package for each field of science and with competencies and skills for valuing the aforementioned, respectively key, common and specific competencies (in the case of highly-skilled personnel)²⁴. These are required for understanding and using technologies and non-technological procedures, for working under conditions of respecting and developing modern industrial relations. Even in the case of unskilled workers, the required competencies on the labour market change and improve constantly and pertain both to initial compulsory education (competencies of reading, writing and communicating) and specific to the knowledge-society (the use of ITC services, teamwork, etc.).

The main stakeholders in education for active life within the current national system are:

- a) **Public and private education institutions** which provide both initial education and continuing vocational training. Education for labour market is not only the responsibility of the secondary and tertiary education system through all its forms. Compulsory education is a first step in gaining knowledge, competencies and skills – as rule basic ones which represent the support for ensuring accessibility to the superior cycles of education which train and prepare the graduate for a trade/career. The predominant beneficiaries of the system are the young individuals, before entering on the labour market or, if we consider the continuation of studies, the graduates who are integrated on the labour market and who continue training in parallel. Obtained diplomas and certificates are recognised by the Ministry of Education and, depending on the field, they may also enjoy international recognition at EU level and not only through the existing mechanisms of recognition/equivalence.

²⁴ The quality in education is defined broadly through the **relevance of the competencies' profile of the graduates on labour market**. The knowledge and competencies might be gained both in the formal, informal, and non-formal system and, as a rule, are certified and acknowledged through evaluation processes – exams and tests/final practical applications after graduating courses, or through evaluation/certification procedures of the empowered institutions.

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- b) **Market providers of CVT**, who train/improve the labour force for employment. The youths using this form of training for completing knowledge and particularly required competencies for employment. The training profile is preponderantly practical and assures improvement/specialisation on narrow fields. The diplomas are recognised with the Ministry of Labour and allow employment on an adequate job in Romania (and not only, if mutual recognition agreements are concluded for qualifications' and competencies');
- c) **Employers**, who through training on the job or external courses provided by the accredited training suppliers on the market ensure targeted training on certain competencies and particularised to the specifics of the company's activity. As a rule, this type of training is recognised only at company level or at the level of a group or companies or employers' associations. If the training was realised in a multinational company, then the recognition of training might be wider, respectively within the entire international network of entities depending on the mother-company – multinational companies, commercial chains, etc.;
- d) **Certification institutions of the gained competencies within the informal and non-formal system**. In Romania, the knowledge and competencies gained in this manner are not recognised but to the extent in which the beneficiaries require their certification in the more than 42 vocational competencies evaluation centres existing at present. In the period 2004-2007, the 42 existing evaluation centres for competencies gained in non-formal and informal system have issued a number of 6050 certificates.

The certification system allows and assures a relative standardisation and saves time and resources, avoiding the attendance of some courses for knowledge/competencies already obtained by the respective persons. Some of the experts consider that this certification system pushes towards uniformity and affects diversity (Fried, Glass, and Baumgartl 2007). Other experts appreciate it as a form of accepting diversity and a step towards achieving a coherent system of lifelong learning, which is open and flexible, adjusted to present conditions when e-learning and e-work turn into usual forms of training/employment and answer to the internationalization trends of the markets and to the free movement of labour force.

Articulating the lifelong learning system is made through procedures and passage mechanisms between education forms (bridges and ladders) which allow for horizontal mobility (both within training programmes of the same institution, but also between various institutions at the same training level), and vertically between the formal and informal or the non-formal system. Transferable credits solve both the difficulties of equivalence of training, but also make the link with the evaluation requirements of the personnel on labour market and the career advancement/development system, which has as basis a linking algorithm of performances on the workplace to the educational stock of each employed person. Thereby is created, including for the young individuals the opportunity of continuing training (second chance) by making use of other training institutions than the ones initially graduated or at the same ones but after a training break, caused by forced disruptions of the educational path, or by a wrong decision in building up a career and active life.

Training institutions, irrespective of their organisation or ownership form act on the education market in complementariness, but also in competition with the other training providers. Performance and quality of training providers is defined both by quantitative indicators – number of courses, number of graduates, share of graduates (re)employed after courses finalisation, etc. – and by qualitative ones: answer degree to market requirements, market orientation and demand responsiveness, the dynamic of curricula replacement, the reform of the learning methods, the capacity to develop for the course participants soft skills deemed necessary to be productive in today's world. Moreover, reaching the performance standards defined at national/international level for graduates represents a performance indicator on the market for the training provider.

The knowledge and competencies generated by the education system can be more or less adequate to the requirements of the labour market, costly and hardly accessible to the future beneficiaries, or not. These two aspects represent, in fact, also the main risks within the education system for labour market, particularly for youths depending on the incomes of households they live in.

Partnership for learning oriented on the labour market requirements takes several forms, among which the most relevant for the topic of the present study are:

- a) *partnership school/training supplier– business environment–research*. Competitiveness in the current stage has two significant pillars for the education system that is knowledge and the capacity of using them in practice. The cooperation of

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companies with the educational institutions allows not only for mutual support for the training of a labour force adjusted to future needs of employment within the business environment (practical training), but also supports and sustains the RDI activity at company level (which might be a natural continuation of research within education institutions or within the research projects developed through the research networks);

- b) *partnership between graduate and potential employer*, a case in which the financial support and practical training within company facilitates not only learning as process but also allows immediate employment and better valuing of gained knowledge and competencies (training is plied on the particular needs of the employer, which implicitly generates increased value added at the level of the workplace, immediately after graduation and employment).

In Romania both forms of partnership are much too weakly developed as compared with the needs, particularly at the level of secondary education. The permanent reform state of the education system and the high volatility of the business environment associated with the insufficiency of the available financial resources and the lack of support financial instruments *have hindered the development of a coherent and performance system of training youth and graduates for the labour market. As a whole, the current national system has significant losses* which include: parallel financial costs and very often oversized in relationship to the expected outcomes and value added generated in the business environment; de-structuring of the labour market, internal but especially external mobility of the national labour market with the loss/failure to put to good use the public investment in the education of young graduates; additional costs for adjustment to the requirements of the labour market (insertion unemployment associated with vocational training); discouragement at individual level of the young graduates about their employment chances and career development; an ambiguous perspective on the evolution of future demand on the labour market with negative impact on the development directions of education, but also on the vocational orientation of youths, particularly after graduating compulsory education.

In principle, initial education is defined as the main contributor to training graduates' generations and preparing them for the labour market, yet the reality contradicts often and, in some fields, systematically, these expectations. The subsequent partnership for

adjustment to the labour market solve imbalances between demand and supply of labour force only partially and on short-term, the need of knowledge and competencies generated by the dynamic of creating new jobs is only to a small extent coupled with the supply of knowledge within the educational system, being necessary more rounds of updating/completion by the CVT system and the second chance in education on different vocational paths.

6. Education for labour market should be a priority of permanent education reform. The adjustment of the education system to the needs on the labour market and increasing the quality of the system presupposes **efforts on the following main directions:**

- *curricular reform*, and of the learning/teaching methods for gaining not only knowledge but also competencies and skills compatible with the labour market demand; the requirement that educational institutions should promote **permanently updated educational programmes** adjusted firstly to domestic demand and compatible with the European standards; development of the knowledge-economy presupposes **tertiary education becomes an important economic growth factor and promoting RDI outcomes** in the economic and social environment;
- *the educational route* – increasing the capacity of pupils to put to good use their skills and knowledge – learning should include knowledge and competencies from a wide and flexible curricular area that would provide the opportunity of **adequately opting for a profession** or for the educational route after graduating initial, compulsory education; promoting vocational education adjusted to the needs of the labour market;
- *adequate and efficient financing* of the educational system and promoting targeted policies depending on the beneficiaries and needs of the labour market and/or of local development, education being a factor of preventing/diminishing poverty; promoting **performance financing schemes**, in partnership by diversifying financing resources and associating them with **fiscal incentives**; applying some **adequate methodologies of determining the education costs per beneficiary**, training levels, types and specialties, considering the optimum ratio between theoretical and practical training, institutional performances, etc.

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- *closer cooperation of vocational training with the business environment* in order to ensure the labour force demand at the secondary training level firstly at local and national level;
- *developing entrepreneurship in education* by maintaining the acknowledged and required quality standards for preserving the linking bridges to European and international education;
- *diversity of teaching methods and learning techniques, adjusting them to the particularities of training and of the beneficiaries' categories.* This implies also the **vocational improvement of the teaching staff and trainers** but presupposes as well the change of the learning culture – interdisciplinary approach instead of exclusively disciplinary approach, flexibility in learning, teamwork to the detriment of individual study, practical learning (participation to research projects, internship) in addition to theoretical courses, examination by means of applicative projects instead of the classic ones (for proofing understanding of knowledge and gaining competencies), using modern information methods and databanks, virtual libraries, etc. (Hagmann and Almekinders 2003; Savery and Duffy 2001; World Bank Institute 2007).
- *Autonomy, transparency, accountability and competition* are the elements that can contribute to quality assurance for the educational act, to its practical recognition through employment and productivity.

The principles that should be complied with in practice for assuring permanent education as instrument of sustainable individual development and economic performance, for social and cultural progress are:

- **Equal access to education** for all categories of pupils/students (non-discrimination on access, support during the entire training period for those lacking sufficient financial resources);
- Developing a **learning culture focused on outcomes**, on individual performance **certified by actual life**;
- ensuring a **common platform of pupils' education**, recognition of qualifications and of diplomas and easing access to recognised handbooks, representative for each field of science, specialisation and education level²⁵.

²⁵ A new approach about handbooks. Pupils might access free of charge or only for a fraction of the cost handbooks, printed copies, in audio version and available for download

The main challenges for education's system reform might be synthesised in the following:

* *Compatibility, establishing connections with the European systems for quality in education* (quality is contextual and therefore must be regarded from the perspective of assuring the expected outcomes, that is particularised depending on the assumed objectives). In the case of Romania, we need an education system adjusted to the open market economy, based on the values of sustainable development and supporting career development.

* *Social inclusion and promoting equality of chances*, as mechanisms of diminishing/preventing poverty.

* *Financing focused on beneficiary and benefits* expected from education; efficiency in resources' allocation (including human resources one).

* *Management and accountability* – transparent standards, performance focused management, stakeholders' accountability.

* *Public-private partnerships* in education and school openness towards the business environment.

Education reform in Romania is nowadays at a new crossroads. The change of learning culture, the creation of a new lifelong learning culture, leaving behind past mentalities and openness towards the business, social and cultural environment represent only some of the “basic needs” of implementing and rendering operational the new system.

Romania experimented frequent legal changes, additions, developments, etc. but without following-up the effects of implementation – direct and indirect ones, on short-, medium- and long-term. Only the “legislative adjustments” of the last years have deeply perturbed the pre-university system and have implemented the Bologna System without a required previous preparation. The generated effects, much less favourable as compared with expectations have speeded up the recent proposals of new changes.

on the net. The handbooks are not only free of charge but they can be adjusted/changed, if necessary. This has a great importance in other countries, if the adjustment and/or the translation of the text are intended. Flat World Knowledge promotes this book together with a learning platform that would allow the pupils to learn one from the other and from books. (Source: <http://www.america.gov/st/webchat-english/2009/September/20090908162635ihecuor5.096942e-02.html>)

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With respect to **education for labour market** there are necessary a sum of **instruments and policy measures** to support the future construction of Romanian school, that is:

- *linking school to economic-social reality*, to the society, to the shaping for future generations of an authentic behaviour based on values by a judicious balance between knowledge, skills and aptitudes gained in school²⁶;
- *rendering compatible* the educational cycles with the requirements of a modern education and with the *European Qualifications' Framework*;
- *bringing closer the school curricula to the requirements of the labour market* (knowledge, skills, competencies) by ensuring the theoretical education and the practical one in a complementariness system through the cooperation between the education (formal, informal, non-formal) with the business and social environment;
- *focusing curriculum on the 8 categories of key-competencies*²⁷: communication in mother tongue and in two international foreign languages; fundamental competencies of mathematics, sciences and technology; digital competencies (of using information technology for knowledge and problem solving); axiological competencies or of valuing (required for active and responsible participation to social life); competencies for the management of personal life and career development; entrepreneurial competencies; cultural expression competencies; competencies of lifelong learning;
- *the assimilation during compulsory education of digital competencies*²⁸ which already represent a comparative advantage

²⁶ National Pact on Education as completed by the Civil Society.

²⁷ The graduates of compulsory education shall gain these competencies at basic level, and college graduates – at advanced level. Based on these competencies the training profile will be clearly established (= what we want the student to know) for each studies' cycle. For each discipline of the teaching plan, the learning contents shall be organised so as to contribute in a coordinated manner to training aforementioned competencies. The main evaluation and approval criterion of a school handbook shall be related to the extent in which it contributes to training mentioned competencies. An items databank shall be created with a guidance function to assist teachers in grading the class to evaluate competencies, not information.

²⁸ European Youths aged between 16 and 24 years are the expert population in using modern multimedia techniques. In accordance with a report published by the European

- of youths on the labour market to the detriment, sometimes, of work experience of mature/elderly generations;
- development of educational policies within the *co-partnership* system between school, local community, business environment and correlated with the national orientation in the field of education and continuing learning;
 - accrediting *schools as centres of permanent education*;
 - *focusing education on the beneficiary* and adopting the principle of “financing follows the student”;
 - ensuring *mixed public/private financing systems and promoting a fiscal system that would stimulate individual and corporate investments in continuing vocational training*; promoting some stimulative financing systems for the teaching staff, adjusted to the modernisation needs of educational institutions, and sufficient to ensure teaching support required for theoretical classes and for the practical applications.
 - *improving the learning act* under the aspect of teaching methods and also from the viewpoint of gaining by the students of the ability to use/value knowledge not only their memorisation; a functional report between knowledge accumulation, competencies gaining and basic skills; radical change of the teaching technology;
 - *improving human resources* in the education system and increasing their efficiency; CVT for teachers;

Commission on EU competitiveness in the field of digital telecommunications this category shall make the future game rules on the European market. Viviane Reding the European telecommunications’ commissioner considers that this generation shall be the new economic power. “More than 70% of the youths make use of the modern Internet data capacities. We called them the digital generation (ed. Note. digital natives), the term including the persons born in this era and who started using the Internet immediately after turning into active consumers on the European markets”, states Reding. Romania takes one of the last positions regarding the penetration rate of broadband internet with 10.7%. Yet it is interesting that Poland, Slovakia and Bulgaria are behind our country with a penetration rate of 9.6%, 9.6%, respectively, 9.5%. The highest degree of broadband internet penetration rate within EU-27 is of 37.4% and is found in Denmark. According to the speaker of the European Commission, Martin Selmayr, the European Union surpasses USA. Yet, on the other hand, the investments in research, and modern multimedia technologies are much smaller than the ones in the USA and Japan (the digital generation shall be the next economic power

D.M. - 05.08.2009, <http://www.baniinostri.ro/IT-C/Generatia-digitala-va-fi-urmatoarea-forta-economica--a1450.html>)

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- *evaluating the quality of education in Romania at last based on the European guidelines* (measurable and standardised; implementation guides, that would provide for the involvement of the beneficiaries; adequate resources; mechanisms and procedures of feedback; transparency; an adequate coordination and correlated at European level for ensuring the coherence and systemic analysis capacity; a cooperation process between initial and continuing training, involving the relevant beneficiaries at community, national and European level; community priorities; dissemination of good practice examples;
- stimulating the *return of youths who studied abroad* for employment in public/private fields and institutions that ensure products/services with value added and contribute to increasing competitiveness (“brain regain”).

The need of actual reform, consistent and well anchored to the national needs in the European context was acknowledged and assumed by the civil society which, by the National Pact on Education defines the intended finality of education – sustainable generation of national, highly competitive and trained human resources according to the current and future demand of the labour market.

7. A possible integrated model of education for the labour market – general framework. An in-depth reform, of essence of the education system with the realisation of a **coherent network of permanent learning based on various institutions and educational forms, presupposes the conjugated effort of the state and of the private environment for supporting the assumed changes.**

The first step is the one of ensuring *the support framework of sustaining the reform at macro level through specific measures and instruments* – stimuli for investment in human capital, including fiscal ones; employment policies targeted on youths and sustaining the elimination of the lack of practical experience (the argument most frequently called upon by the employers on refusing employment) by financing training on the job or practical training with authorised providers. Ensuring the coherence between school curricula for various forms and levels of education, and updating it in accordance with the requirements of the National Qualifications’ Framework; increasing the quality of primary and lower-secondary education and assuring the gain of basic competencies for each educational level. The next step should be *to assure the knowledge of*

educational supply and the transparency of the system, in order to avoid wrong changes and subsequent re-orientation, for all forms of education, from the public and private system, by mentioning the possible learning routes. Supporting the informal and non-formal education forms as alternative to classical education, and promoting the modern learning forms – e-learning, short specialisation stages, distance-education, etc. might lead to an increased flexibility of the possible paths of gaining knowledge and competencies, and to the association/alternation of learning periods with full-time or part-time system employment on the labour market. Hence, the employment capacity increases, and the business environment might identify candidates with a career profile closer to the needs. The partnership school-business environment in training competencies for the labour market remains the most efficient and flexible way of learning and subsequent employment allows for more rapid integration of the youths on the labour market, practically without insertion unemployment stages

A rather controversial issue in Romania, as in many other countries is represented by the **accountability of the public system in the development of educational systems adjusted strictly to the needs of the labour market vs. the support of education for human development on long-term** (the third step). The exclusive orientation on a single direction is not possible, yet by targeted temporary measures one side or the other might be emphasised. It is obvious that education should be promoted in a systemic manner, starting with the acknowledgement of the need of lifelong learning and particularly, during the active life. Considering the current demand for education of the labour market, and the present and long-term restrictions, we consider that any policy in the field, irrespective of the emphases developed on knowledge fields must promote the following aspects:

- mutual support of education by the social actors by developing long-term links and stable partnerships between training providers and economic agents;
- improving the answer/reaction of education providers to the labour market developments as a way of efficiently using the training resources;
- developing policies for supporting vocational and technical education, and diversification of the financing sources/forms through levers of facilitating payments and/or of recovering costs;
- supporting education/training on the job through incentive policies, promoting support financial instruments and recognition of education's quality;
- supporting informal education for vocational training;

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- developing key-competencies recognised on the labour market and promoting entrepreneurial competencies for liberal trades and self-employment, in accordance with the European Qualifications' Framework.

Some competencies that shall be demanded in the future on the labour market may be anticipated, some not. Therefore, **education for labour market is based on four pillars**, respectively:

- a) *gaining generic competencies within secondary education* as basis of continuing education in its superior forms;
- b) *promoting increased flexibility in finalising vocational and technical education programmes by strengthening related specialties* with a wide application sphere on activities and fields;
- c) *orientation of secondary and tertiary education on the estimated demand on professions and trades* and improving the parents' and pupils'/students' information system about the possible options of the educational path;
- d) *developing in complementariness an adult education system easily accessible for young graduates* for completing education on punctual/specific components (World Bank 2008b).

The scheme of an **integrated education model for the labour market** starts from the need of coherence within the system, of the existence of a permissive legislative and institutional framework, and of inter-correlated policies which are categorised under the two wide coordinates of young individuals' training for the labour market, respectively the Lifelong Learning Strategy (under development) and the National Strategy of Labour Force Employment. The proposed framework allows for rendering efficient the functioning of the existing institutions on each organisational sub-system of education during the entire life span, yet it is necessary to create, and especially to ensure the functionality of some links/channels of information transfer for assuring/facilitating the educational path before or after insertion on the labour market through educational routes open and flexible to the vocational adjustment, (re)orientation depending on the dynamics of labour market demand for knowledge and competencies.

A possible scheme of integrated strategy for promoting youths on the labour market and increasing their role in higher competitiveness would include as compulsory parameters:

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i) adjustment of the educational supply to the demand of the labour market; on profiles and specialties, on types of knowledge and key-competencies, etc., in view of facilitating labour market insertion of graduates;

ii) a set of *specific indicators for multidimensional definition and characterisation* of the youths' issues on labour market – under the aspect of flexicurity, of the youths' lifecycle perspective and of human development, It may be used for substantiating the specific strategies and policies and, particularly for monitoring the efficiency of labour market and social inclusion of the youths;

iii) *adequate/particularised youth employment policies* on the labour market (increasing employability) by complying with at least three conditions: coordination of monetary, financial and incomes' policies, the reform of the labour market and of the social assistance services' system, increasing individual autonomy and young labour force mobility through permanent investments in continuing training (lifelong learning);

iv) support policies for *improving the living conditions of the youths* – recent studies highlight the constant deterioration of the living conditions for young individuals;

v) *behavioural reform* of the youth – diminishing uncertainty and increasing the risk management opportunities – a new culture of active participation to labour market;

vi) *periodical analysis/evaluation of the public policies*, of failures and promoting best practices.

The applicability of this model shall presuppose and ensure at the same time:

- **developing integrating curricula** on educational fields and routes flexible to market demand (on short-term) and which should incorporate educational models of completing/renewing knowledge and competencies for the future demand of the labour market (medium- and long-term);
- the improvement of the **quality certification systems** of the educational act and achieving coherence of the sub-systems from the viewpoint of exigencies and follow-up indicators;
- **an evaluation system of educational processes** and of calculating the economic and social impact by using an integrated system of follow-up indicators and the management of a databank that would allow for the highlighting of the dynamics of bringing closer the educational supply to the market demand

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The reform of education in order to train graduates for labour market continues. The last years of continuing changes within the education system and the lack of coherence with respect to the inter- and intra educational components impose rapid and of essence reconsideration of the expected finalities, that is conditioning reform measures on labour market demands: careers and vocations for the market and not depending on the vocational expertise of the teaching staff, a curriculum focused on actual needs, a vocational profile focused on national requirements. The quality of the educational act remains the main challenge of the new reform measures to which is added the need of coherence between the components of formal education, between the aforementioned and informal and non-formal education, and the support for successful implementation of the reform measures is represented by the public-private partnership by means of multiple, varied and innovative financing schemes.

Youth's employment is much more volatile than for mature labour force. *The youths' labour market is characterised by an opportunities' deficit for decent employment, diminishment of workplaces, precariousness of employment (increased number of part-time jobs, of temporary employment) and diminishment of wages.* Youths are faced also with increased difficulties on entering the labour market, considering that also during the period of economic expansion there were problems in creating new jobs for them. The lack of employment perspectives on a decent job on entering the labour market affects/compromises the labour market route. In addition, *unemployment among youths shows specific vulnerabilities – increased sensitiveness to variations of economic activity, difficulty in creating new jobs for youths', higher duration of the unemployment period, easier entry on the informal labour market, which becomes a true refuge, particularly for graduates.* The estimates of the experts indicate that an increase of the total unemployment rate by 1 percent is accompanied by a diminishment of employment among youths of 1.1. – 1.8 percents, and Romania is among the EU member countries with the highest unemployment rate among youths and that an increase is expected in this regard. The crisis “generates” precarious jobs for youths, which are poorly remunerated, very often under the level of skills, and triggering loss/depreciation of competencies or long-term unemployment and discouragement, and increased poverty incidence.

The required anti-crisis measures for revitalising the youths' labour market must start from the reality that any crisis represents an incentive for development, an opportunity for increasing competitiveness by creating new jobs, allows putting to good use new knowledge, competencies and skills which are much more accessible to youths than to the re-qualified or continuing training labour force. In addition, the benefits of a well-trained and desirable of vocational affirmation young labour force are well known on the labour market and to the business environment. Increasing efficient employment opportunities for youths represents a stimulus for a more marked dynamic of economic turnaround, with multiplying effects on long-term. **Possible anti-crisis measures** and for stimulating youth's employment consider:

- *flexibility*: creating/maintaining workplaces with flexible working hours associated with part-time jobs;
- *entrepreneurship*: promoting entrepreneurship including by start-ups financing schemes;
- *training for integration on labour market*: developing internal adjustment systems on the jobs for youths by short-term training stages; promoting apprenticeship on the job and internship for youths in order to quicker adjustment to the requirements of the workplace under the aspect of skills and competencies;
- intensifying *active measures* aimed to youths' employment/re-employment – counselling, searching/creating new jobs, fiscal facilities for employers.

Education is an obvious necessity for a productive and rewarding life and contributes to the economic and social progress for individuals and country. (Population Reference Bureau, 2009). The market defines the training needs and the quality of education is certified on the market by valuing knowledge, competencies and aptitudes.

INTRODUCTION

In a globalised world where **knowledge means power** the need for knowledge and competencies for the labour market cannot be ignored. **The education stock is a public strategic good** and education for labour market a necessary, viable and efficient instrument of valuing knowledge and competencies of the young labour force. *A competitive economy nowadays depends to a higher extent on performance and competitiveness of the education system, on the ability to promote functional networks of continuing learning based on multi-partnerships and institutional responsibility and on valuing education outcomes by employment and active citizenship.*

The present paper represents the outcome of researches developed for elaborating the study “**Improving Competencies among Graduates and Youth: a Chance for the Future**” – Study no. 4 – within the programme of Strategy and Policy Studies -SPOS 2009. The paper comes to add to the thematic of the studies developed by the European Institute of Romania for the last years related to education and questions about the human resources and the labour market by emphasising the importance of coherence and interdependency of policies on the education market and on the labour market. Education, in its wide meaning, of lifelong learning is reconfirmed at international level as a basic requirement for personal development and welfare and as a factor of economic and social progress. **Education is acknowledged as useful to society** through the activity developed by graduates on the labour market, and in its turn, the business environment, the social life and the level of human development model the content of education, of school curricula.

Education is an engine for the development of business and social environment through performance on the labour market which, in fact, confirms the quality of learning, irrespective if formal, non-formal or informal. Moreover, in the knowledge-based society the importance of knowledge, competencies and skills associated to the new technologies and to the broad use of ITC products and services increases. Even more the economic-financial crisis which we undergo has generated the orientation towards ecologic technologies, including the “low-carbon” ones and the economic turnaround based on the development of new activities that incorporate new knowledge and competencies pertaining to the “cutting edge sciences” fields. The crisis is regarded as an incentive/factor of development and the investment in education the means/facilitator that is “most performing on long-term” and which warrants not only economic turnaround but generates also changes of essence in the social and human development.

The present study has as **general objective to put to good use the European framework and opportunities** in the field of training and developing competencies among graduates and youth and intends to present a series of proposals and measures that should shape a **model to be pursued for national policies in the field, anchored in the Romanian realities of now and of the future**. It is realised in a multidisciplinary approach – legal, economic and educational – and starts from a diagnosis of the training process of competencies, highlighting the extent to which current mechanisms, instruments and policies from the education field answer to current and future needs of the labour market, the extent to which current practices at national/European level might contribute to closer linking of knowledge, competencies and skills supply and demand, under the conditions of increasing the dynamics of incorporating new technologies in production and daily life, of deepening the process of European integration and globalisation. The study, in substantiating the proposals for measures and policies takes into account the coordination with the *trends and orientations at European level with respect to developing competencies* among graduates and youths.

Based on the analysis of the training process of competencies in Romania, of adjusting the national system to European requirements and considering the exigencies/challenges in the field under the conditions of the new technologies and of the process of economic globalisation, the authors underpin **the extent in which the current system addresses the labour market, the current and future needs, and supports change and adjustment and maintains/preserves dysfunctions**.

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Finally, the study takes into account the recent developments at legal and institutional level within the EU and the fact that the deepening of the European integration process²⁹ influences and even “models” the national development systems of competencies, modifying the perspectives of approaching this process.

The study, in its structure, starts from presenting the national legal framework in the field of training and developing competencies among graduates and youths, and highlights the particularities against the European system and the provisions of the Lisbon Strategy³⁰. In it is analysed the impact of diploma and certificates acknowledgement within the national system and the optimisation of national legislation. Finally, a critical presentation is made about the institutional system playing a role in initial and continuing training under the aspect of their accrediting/authorisation, of ensuring the educational finalities (knowledge and competencies), the relationship with economic agents, the monitoring and control system, as well as the mechanisms of quality assurance.

Another level of the analysis considers the coherence and compatibility degree between the educational system as a whole (formal/informal/non-formal, public and private, etc.) and the requirements of **education and training of the labour market**. Starting from identifying the resources and motivation for investment in training and improvement from the stakeholders’ perspective, the support/stimulating factors and the risk factors are highlighted and proposals are made for improving the system of lifelong learning from the viewpoint of the benefits that they generate at economic, social and cultural level (economic performance, social risks diminishment, cultural development, etc.).

Starting from the current cost of training and the trends of increasing education costs in general, on the background of strategic development, the

²⁹ In the preamble to the Treaty on the Functioning of the European Union is emphasised that the chiefs of state and of government are “determined to promote the development of the highest possible level of knowledge for their peoples through wide access to education and through its continuous updating”.

³⁰ The Lisbon Strategy (or Lisbon Agenda/Lisbon Process) represents a set of objectives, priority fields of action, targets and measures for guiding the European policies of economic growth and employment towards achieving the strategic objective of the European Union to become the most dynamic and competitive knowledge-based economy. The Lisbon Strategy was adopted by the Extraordinary European Council of Lisbon from 23-24 March 2000 and renewed by the European Council of Brussels from 22-23 March 2005.

<http://www.mae.ro/index.php?unde=doc&id=34943>;
http://ec.europa.eu/growthandjobs/objectives/index_en.htm

need for flexibility of the system is underpinned along with the one of prioritising the training fields also under the temporal aspect. The role of broad partnership is identified in the field of continuing training (including here political, social and civil powers) in increasing the efficiency of the system and narrowing the profile of the training supply to the demands of the labour market. In this context, the role of cooperation between the various stakeholders on the market and the education and training system increases with respect to competencies development.

Within the study a series of recommendations are made for reforming the current system, under the aspect of legislative and institutional structure, as well as considering the most adequate mechanisms, instruments and policies for the efficient functioning of the system. These proposals start from the constitutional principle of the right to education for all, without discrimination and emphasise the practical utility of learning for the labour market, for economic competitiveness and social and cultural development. Education defines its value through obtained outcomes from using knowledge, competences and aptitudes on labour market and within the community. The proposals took into account the opportunities and risks for Romania at European and world level, the need to present ourselves as credible partners on the market, of valuing the comparative advantages and of making efficient use the most valuable resource within the knowledge society – the performing human capital.

Chapter 1. DEMOGRAPHIC AND ECONOMIC-SOCIAL CONTEXT OF YOUNG LABOUR FORCE DEVELOPMENT

Today, due to the increasing market competitiveness, to the markets' internationalization process and globalisation it is far more profitable at national level through cooperation between stakeholders to find specific solutions for promoting the development strategy of human resources in accordance with the economic-social sustainable development having as support continuing learning. The coordination of national strategies represents a necessary step for the coherence and sustainability of Romania's development – the strategy of sustainable development was finalised in 2008 and the one of integrated development of human resources in view of lifelong learning is under the elaboration process and recently a new package of education laws was developed³¹. In addition the reform process of vocational education and of the CVT national system continues is further carried on with the perspective of adjusting curricula and its development in accordance with the new key competencies adopted at national level and in within the European Qualifications Framework under the conditions of improving the certification system of competencies and of diploma recognition. The general purpose is to generate through human resources and their performances comparative advantages and sustainable economic growth. The national priorities about economic, social and educational development – underpinned in the programmatic documents with respect to education, human resources development, employment and other fields of interests (including post-accession strategies, and sectorial operational plans) increase the importance of permanent learning³² as factor for developing a knowledge-based economy and a society.

³¹ On the date of developing the study the National Education Law for which the Government assumed responsibility in the month of September 2009 was disputed at the Constitutional Court and declared as unconstitutional. The new Government constituted in December 2009 has as priority, among others, to promote the law but this time under its revised form, following the usual way of Parliamentary debates and approval. It was proposed to promulgate this law before the beginning of the school year 2010-2011. The form sent by the Government is published at the web address: <http://www.gov.ro/upload/articles/106607/legea-educatiei-nationale.pdf>

³² **Permanent learning** represents the assembly of learning experiences provided by the society during the entire life span of individuals, including activities of learning developed during the entire life with the purpose of improving knowledge, aptitudes and competencies

The educational services' sector knew a significant growth in the last decades, particularly for tertiary education and CVT. Education reform, initiated at the beginning of the nineties continued being centred on at least three significant directions: legislative adjustment and institutional development, curricular diversification and modernization, improvement of teaching techniques, of education types and of management methods. The demographic decrease after the revolution, the shift to market economy, the free movement of persons, the accession to the European Union, the increase of economic competitiveness and last but not least the economic and financial crisis are factors that acted with varying intensity and within different time frames on the initial and continuing education system in Romania particularly by way of acknowledging the social value of the outcomes of the educational process – the need for knowledge, competences and aptitudes, the capacity of valuing them through the working process, the efficiency of public investment into education, the contribution of the human capital and of the educational stock to economic growth, social and human progress, and the sustainable development of communities. The initiated reformed aimed the each part of the systems' components pursuing the improvement of the systems, performance and adjustment to the competitive market. The functional relationships between the systems' components are weak and a clear and programmatic vision is lacking about the evolutions, role and priorities on short- and medium-term. Additionally, the economic and social context in which the education reform was realised did not represent an incentive for in-depth change, but rather supported the temporary, punctual adjustment measures of educational supply at a weakly perceived and particularly volatile demand, confuse and lacking perspective on long-term (Vasile, Zaman, Perț, Zarojanu, 2008).

The main **factors** which influenced the reform of the national education system were:

- *the dynamic of the economy and structural changes*, preponderantly as answer reactions, of adjustment on medium-term to the demands of a still weakly performing market, volatility of economic growth and the lack of a long-term economic development coherence, of specialisation, and increased competitiveness on activities and branches;
- *demographic ageing* as result of decreased birth rate and migration, especially of young individuals;

from personal, civic, social perspective and/or from the viewpoint of the link to the labour market (of employability).

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- *the need of linking to the European Education Area and of assimilating the *acquis communautaire* in the field ;*
- *internationalisation of university education and implementing the Bologna Process* within a weakly performing educational system and much too less oriented towards future demand of the business environment and of the RDI system for promoting the excellence certified by the economic practice, and participation to fundamental and applicative research development.

1.1. Demographic evolutions impacting on the potentially active young population

While at world level the number of youth increases, Romania along with Europe ages. The need for education and performance among youths remaining on the national labour market is the higher as Romania faces on the globalised market young states from the demographic viewpoint and/or capable of attracting highly qualified labour force (brain drain).

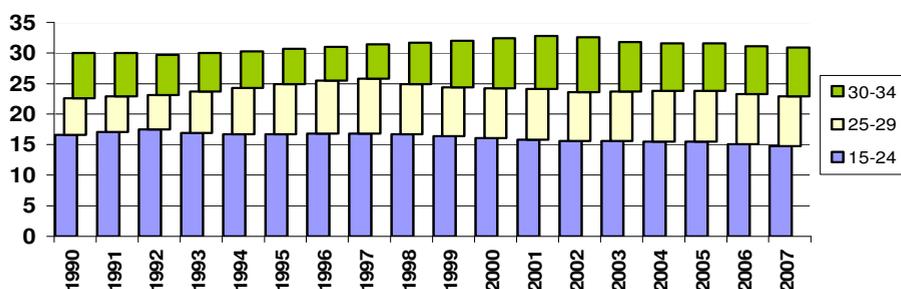
With a population of 21.5 million inhabitants³³, Romania faces for about two decades now population decrease, the natural increase being negative (in the year 2008 was recorded a birth rate of 10.3 live births for one thousand inhabitants, against a general mortality rate of 11.8 deceased for one thousand inhabitants). In the post-revolutionary period, Romania's population diminished by 1.7 million inhabitants which represents a loss of human capital of more than 7% to which is added also the temporary labour migration (estimated by some experts to about 2 million persons).

Even though the negative demographic trends are maintained, we should mention that after the year 2000 a slight improvement could be recorded, and in 2006 was registered for the first time after 1990 a higher number for the population aged between 0-4 years as compared with the preceding year. Nevertheless, the structure on ages of the population reveals an ageing process by a diminished share of youth (0-14years) from 18,3% in the year 2000 to 15,3% in 2008 and an increased share of the elderly population (65 years and over) from 13,3% to 14,9% (2007). The average age of the population was, at the beginning of 2008, of 39.2 years of age. **Nowadays the share of youths up to 15 years of age in total population is of 27% at world level, and of just 15% in Romania and at European level, and of the elderly (persons aged 65 and over) of respectively 8%**

³³ In accordance with the data supplied by the National Institute of Statistics "Romania in Figures" May 2008

against 15% (in Romania and 16% at European level)³⁴. After 1992 the population segment aged 15-24 years decreases, and the trend shall continue for the following years, so that the cohorts of graduates shall be increasingly diminished and gradually smaller numbers of youth will enter on the labour market.

Graph 1. Share of the youth at working age in total population in Romania (%)



Source: Based on Statistical Yearbook; time series 1990-2008, NIS, Bucharest

At the level of the year 2007, the labour resources in Romania (population aged between 15 and 64 years) was of 15.05 million persons, on increase by 100 thousands against the year 2002, yet a continued decrease is forecasted at the level of 15.01 in 2010, 14,97 in 2013 and 14.87 in 2020.

The analysis of the demographic evolutions' impact from the viewpoint of increasing employability highlights an important amount of restrictive elements, among which: births decrease and deterioration of the population structure on ages; high values of infantile and maternal mortality; change of the demographic behaviour of young couples opting for fewer children (preferably one) and this child is born at a later age of the mother; massive decrease of births for mothers with higher education level and average living standard level; migration (particularly external migration, but also internal) from less developed areas (rural area, small towns, etc.) all generating imbalances and even depopulation in territorial profile when not compensated by births.

If at world level the population shall increase by 2050 with 1.2 billion persons (17.4% compared with the current level of 6.8 billions), in

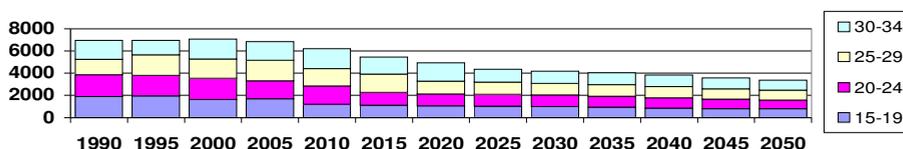
³⁴ <http://www.prb.org/Publications/Datasheets/2009/2009wpds.aspx>

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Romania it shall decrease by about 25%. With a fertility rate of 1.3 by one thousand (inferior to the replacement rate of 2.1 by one thousand) and a significant labour migration as numbers, Romania will face a significant diminishment of population.

Even though in the last years was recorded a slight trend of reorientation among the fertile population towards family and children, the demographic decrease trend is maintained. The UN forecasts indicate that for the time horizon of the year 2050 the young population shall be diminished, the one aged between 15-19 years shall include only 787 thousand persons as compared with 1869 thousands in 1990 and 1640 thousands in 2000, and the one between 20-24 years of age shall count 807 thousand persons, against 1974 thousands in 1990 and 1900 thousands in 2000.

Graph 2. Romania's population of 15-34 years old, in the period 1990-2050



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 Revision, <http://esa.un.org/unpp>, Romania, Population by five-year age group and sex (thousands), Medium variant, 1990-2050

The risks at demographic level related to ensuring the human capital for the labour market derive from the drastic diminishment of school population as result of the long-term effects of the demographic phenomena. Even if by adequate stimulating measures a redress shall be recorded in the future with respect to births, the demographic evolution of the last two decades of transition shall influence demographic ageing and the decrease of the labour potential up to 2025, and a downsizing of the labour market, lest this deficit shall be compensated by immigration. Moreover, the current demographic crisis may on one hand maintain the young population behaviour of postponing the grounding of a family and procreation, respectively with low fertility rates or, on the other hand, due to the

incapacity of the economy to turnaround and create new jobs, or lastly we could be faced with migration phenomena for labour to areas that succeeded earlier to counteract the effects of the crisis generating employment (it is particularly the case of young families and of those with higher education).

The effects of demographic ageing on the dimensions of the labour potential might be counteracted by measures and policies of stimulating population increase: pro-birth policies (social programmes aimed towards family and child); efficient policies of public health for children; maintaining a positive external migration rate by return of the persons migrating for labour in the last years to European Union countries and increase of the number of immigrants from non-EU countries.

1.2. Youths on education market, as potential supply for the labour market

The demographic phenomena and persons' mobility, particularly the one of young families triggered the diminishment of school population. Nevertheless, after 1990 was recorded an increase of the share of youths remaining on the education market by an increase in the numbers of those continuing their studies within tertiary education. A stimulating factor for continuing training is represented by the accessibility of youths for the second faculty and the following, and the opportunity of parallel studies within several faculties and/or educational levels (university studies, second faculty and masters, etc.). The decision to continue studying is determined in several cases also by the difficulty of obtaining a job after graduating a secondary or tertiary education cycle and very often is chosen as an alternative to unemployment and as a way of increasing employment chances by gaining several qualifications or professions.

The diminishment of the school age population due to the negative demographic evolutions of the last decade of the preceding century triggered also the diminishment of the population enrolled in the education system.

The general trend of population's diminishment does not influence in direct proportion the school population as well, due to the different specific enrolment rates, on ages, or per the assembly of age groups corresponding to the respective education levels. Primary and secondary education is affected to the highest degree by the demographic evolutions. At the level of upper-secondary and vocational education, as result of the increased demand of education for these training paths, as well as effect of the measure of extending the period of compulsory education to ten years, the student cohorts recorded a permanently increasing trend, a tendency showed as well

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for the urban and rural school population. But, differing from the primary and lower-secondary education the increases are significantly higher in the rural areas, as compared with the urban ones. Thus, in the period of reference, at upper-secondary level, these increases are of 2.6 thousand students in the urban area and of 101.8 thousands in the rural one. Within vocational education the increase recorded in the rural area is of 15.2 thousand students, within the urban area taking place a diminishment by 34.4 thousand students. The diminishment of the number of students enrolled in vocational education in the urban area is noticed especially at the level of the last two school years - 2006/2007 and 2007/2008. All in all, for the urban area, and for the rural one is noticed an increase of the education demand on levels of upper-secondary education to the detriment of vocational education³⁵.

The most significant increase of school population was recorded in higher education – by 374.8 thousand persons in the period 2000/2001, in the case of this education level being shown the highest increase of the education demand.

³⁵ ROMANIA - Report on the state of the national education system 2008, Ministry of Education, Research and Youth, www.edu.ro

94 Table 1. Participation to education. Evolution of pupil and student cohorts

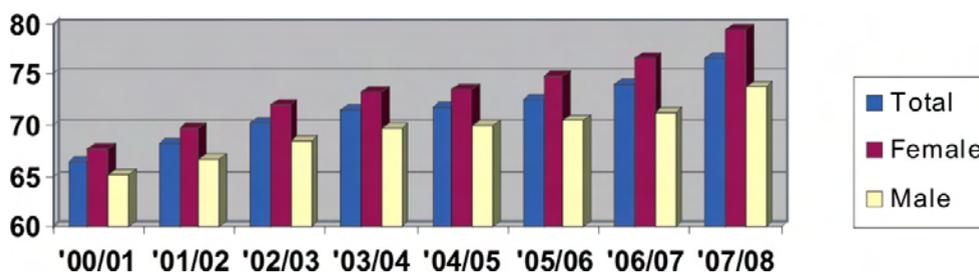
	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Total from which	4549825	4538714	4482287	4459238	4390835	4360896	4342971	4390921
<i>Upper-secondary education</i>								
Total	684461	706670	736608	755577	770888	767543	778351	788827
Urban	522387	532540	545167	552866	553970	542784	543866	524977
Rural	162074	174130	191441	202711	216918	221759	234485	263850
<i>Vocational education</i>								
Total	239532	252331	270192	279110	289478	284394	250366	220322
Urban	138111	144042	149340	147333	146470	144064	125877	103702
Rural	101421	108289	120852	131777	143008	140330	124489	116620
<i>Post- upper-secondary education</i>								
Total	82027	72613	61789	54707	48664	43596	37678	45497
Urban	63756	56388	47319	41848	37723	33286	29186	34781
Rural	18271	16225	14470	12859	10941	10310	8492	10716
<i>Higher education</i>								
Total	521483	571613	586567	611779	641400	716464	785506	896258
Public	370912	424864	447633	468024	486419	513678	520263	516650
Private	150571	146749	138934	143755	154981	202786	265243	379608

Source: ROMANIA –Report on the state of the national education system 2008, Ministry of Education, Research and Youth, www.edu.ro (Data do not include foreign pupils and students).

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The school enrolment rate increased significantly after 2000, but remained at a very low level as compared with other European countries³⁶. The gross rate of school enrolment on all education levels (ISCED 1-6) in the school year 2007/2008 reaches 76.6% and in 2008/2009 it is about 80% (79.6%). The increasing trend is visible for female population, and for the male one as well, the differences on genders being in favour of the female population. The participation rate to education of female population is superior to the one recorded by the male population in case of upper-secondary, post upper-secondary and higher-education. The differences on genders are more marked towards the end of the interval: from 2.5 in the school year 2000/2001 to approximately 5 percentage points in the last school years.

Graph 3. Gross school enrolment rate on all education levels



Note: In computing the indicators pre-primary education was not included.

Source: National Report of Human Development 2003-2004, UNDP and data calculated based on NIS information, 2005-2008

For upper-secondary and vocational education the gross school enrolment rate increased continuously from 71.4 in 2000/2001 up to about 85% in 2007/2008. The increase of the indicator's value occurred at upper-secondary level, but also at the level of vocational education: by 13.8 p.p. for the entire upper-secondary level (from 52.6 to 66.4) and by 7.3 p.p. for vocational education (from 18.5 to 25.8). The gross enrolment rates are higher in upper-secondary for women and in vocational education for men.

³⁶ According to EUROSTAT data, at the level of the year 2006, Romania was placed on the second last place, with Bulgaria on the last with respect to participation to all levels of education (ISCED 1-6) for the population aged between 5-29 years. The value of the rate recorded 50.5%, against 63.8% - Lithuania, 60.2% - Poland, 62.0% - Slovenia or over 66% Norway and Finland, the EU-27 average being of 59.2%. The value of the indicator is on increase by 2.1 percentage points against the year 2000 when it registered 48.4%.

A significant gap is maintained between the urban and rural area, even continuous improvements were recorded from 2000 up to now – from a difference of about 36 p.p. in 2000/2001, to the detriment of the rural area, to approximately 25 p.p. in 2007/2008 (with very high differences in upper-secondary –constantly by over 30 p.p. more in the urban area- and more attenuated for vocational education – between 1 and 7 p.p., but in favour of the rural area).

For the technologic educational route a significant increase is noticed for the gross rate of school enrolment (from 28,5% in 2006/2007 to 32,6% in 2007/2008), while on the vocational and apprenticeship education route/SAM a decrease can be observed (from 19.5% to 18.5%)³⁷. Even if the trend recorded by the enrolment rate in secondary education is positive the participation of pupils from the rural area to this level of education remains low (about 71%, against 96% in the urban area). Taking into account only upper-secondary education the participation rate of the pupils in the urban area is almost two times higher than for the ones in the rural area: 80.3%, against 49%. Hence, almost one third from the youths in the rural area of corresponding school age (as compared with almost 4% in the urban area) do not have access to the secondary level of education, with disparaging effects on the development of the human capital in the rural area.

Table 2. Gross rate of school enrolment in upper-secondary education, on training paths and profiles

Education level	2000/ 2001	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008
Total secondary education	71.1	74.8	74.7	75.0	76.4	75.0	80.0	84.9
Total upper-secondary education, from which:	52.6	55.1	54.6	54.9	55.5	54.7	60.5	66.4
- Theoretical and vocational upper-secondary	29.6	30.7	30.5	30.3	30.5	30.1	32.0	33.9
- Technological	23.0	24.4	24.2	24.7	25.1	24.6	28.5	32.6

³⁷ An increase of the enrolment rate takes place for the entire vocational and technical education – the technologic educational route of upper-secondary and SAM – from 48% to 51,1%.

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upper-secondary education								
Vocational and apprenticeship schools /SAM	18.5	19.7	20.0	20.1	20.9	20.3	19.5	18.5
Total technological upper-secondary, vocational and apprenticeship schools	41.6	44.1	44.3	44.7	46.0	44.9	48.0	51.1

Source: Data calculated based on NIS information, 2001-2008.

With respect to higher education, the increase of the gross school-enrolment rate is almost double, respectively from 27.7% in 2000/2001 to 53,6% in 2007/2008. The extension of the schooling period is due mainly to the increase of the specific enrolment rate for the ages between 18 years and 21-22 years. For these ages the increase recorded in the period 2000-2007 varies between 20-27%, and in the school year 2007/2008 as compared with the preceding year, between 6-7%. The difference between females and males with respect to the period of attending education is also the consequence of a more marked increase of the higher-education enrolment rate for girls. At the level of the year 2007/2008, for instance, the specific enrolment rate for the ages of 21-22 years (ages corresponding to higher education) was higher in the case of females by 11%.

Table 3. Specific rate of school enrolment on age groups

	2000/ 01	2001/ 02	2002/ 03	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08
18 years old								
Total	54.5	58.2	62.2	57.4	63.0	60.2	69.1	75.5
Women	59.3	64.2	68.1	62.7	69.2	67.0	74.5	81.4
Men	49.9	52.4	56.6	52.3	57.1	53.7	63.9	69.7
19-20 years old								
Total	32.5	34.9	39.1	41.1	41.1	43.1	43.9	48.1
Women	36.1	39.2	43.9	45.9	45.7	48.7	48.9	54.5
Men	29.0	30.7	34.5	36.5	36.8	37.8	39.2	41.9
21-22 years old								

Total	26.8	29.2	32.1	34.1	36.8	41.8	46.4	53.9
Women	29.1	31.7	35.2	36.9	39.9	45.5	50.6	59.6
Men	24.6	26.8	29.2	31.3	33.8	38.4	42.5	48.6
23-24 years old								
Total	10.6	11.6	12.7	13.3	13.8	15.4	17.4	20.7
Women	11.0	12.6	13.2	14.0	14.8	16.1	18.5	22.0
Men	10.3	10.6	12.2	12.7	12.8	14.8	16.3	19.5

Source: ROMANIA – Report on the state of the national education system 2008, Ministry of Education, Research and Youth, www.edu.ro (Data do not include foreign pupils and students).

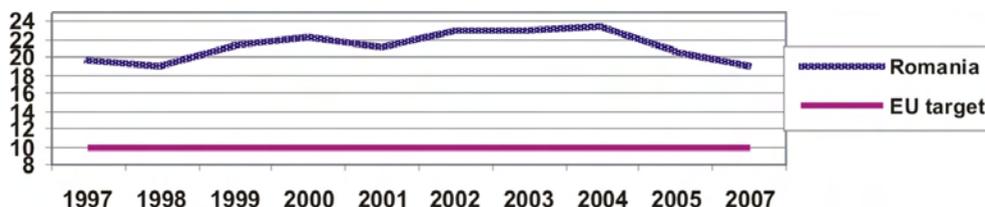
The effects of increasing the participation to education of young population on labour market are defined by higher capacity of obtaining performance at the job and increased adaptability to changes on labour market generated by the technological progress, hence education remains a factor of stimulating of competitiveness growth on the market for the economic agents that employ young and better educated labour force. The advantages are shown on medium- and long-term, whenever the disadvantages due to lack of previous work experience or at the respective job are attenuated/vanish.

Yet, if we consider also the internal efficiency of the education system and analyse the early school-leaving rate of the education system of the young persons aged between 18 and 24 years, then we notice that **youths leaving education market before finalising studies shall exercise a pressure on the labour market on their own education system – CVT and/or shall take low qualification jobs which, due to the absorption of the technical progress are on permanent decrease.** Under these circumstances young persons might return subsequently within the education system for completing their studies in a formal, non-formal or informal system in order to take adequate jobs.

The early school-leaving rate in Romania is on decrease, and diminished in 2007 by three percentage points against 2000.

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Graph 4. Early school-leaving rate in Romania



Source: Europe Website (structural indicators), 2006; Eurostat, 2008

Even if in the last years there was recorded a decrease of the value of the indicator, this registers a much higher level than in the majority of EU member countries. At the level of the year 2007, the value of the indicator for Romania recorded 19.2%, against countries such as Slovenia – 4.3%, Poland – 5.0%, Czech Republic – 5.5%, EU-27 Member-States – 14.8%. At the level of the same year, Romania is still at an advantage against Spain (31.0%) and Portugal (36.3%).

Table 4. Early school-leaving rate – comparative data

Country	2000	2007	Difference 2007-2000
Romania	22.3	19.2	-3.1
EU-27	17.6	14.8	-2.8
Czech R.	5.5	5.5	0
Slovakia	5.6	7.2	+1.6
Slovenia	7.5	4.3	-3.2
Poland	7.9	5.0	-2.9
France	13.3	12.7	-0.6
Hungary	13.8	10.9	-2.9
Estonia	14.2	14.3	+0.1
Lithuania	16.7	8.7	-8.0
Cyprus	18.5	12.6	-5.9
Latvia	19.5	16.0	-3.5
Bulgaria	20.3	16.6	-3.7
Spain	29.1	31.0	+1.9
Portugal	42.6	36.3	-6.3
Malta	54.2	37.6	-16.6

Source: Eurostat, 2008

Nevertheless, the perspective of reaching the EU established target – diminishment of this indicator's value to maximum 10% up to 2010 – is yet problematic if we take into account the increasing trends recorded by school abandon in primary and lower-secondary education.

Another significant aspect for the labour market, next to the gross rate of enrolment and the average period of education attendance is represented by the capacity of finalising studies which measures by two indicators – that is the rate of early school-leaving and the rate of graduation. It should be noticed that **an early school-leaving rate of over 8% (8.2% in the school year 2006/2007) for vocational education induces setbacks on the labour market considering the employment capacity, efficiency/performance on the job and with respect to shifting to higher levels of education (post upper-secondary or tertiary education).**

With respect to the reasons of early school-leaving we remind: a) those of family nature: the precariousness of the social-economic conditions of the family, with impact on the possibility of supporting children schooling, the reluctance of some parents about their children's education, etc.; b) the change of school and vocational options of the youths during schooling³⁸.

The graduation rate of upper-secondary education, with or without baccalaureate examination (calculated in relationship to the population of the theoretical age for graduation - 18 years of age), had a fluctuating development at the level of the school year 2006/2007 as the indicator reaches the highest level of the last 7 years– 55.5%, and with the lowest rate of 47.9% recorded in the year 2001/2002. The difference between the graduation rate with baccalaureate examination and the rate of those finalising upper-secondary education without baccalaureate diploma is placed during the entire period of reference, including at the level of the school year 2006/2007 to less than 5 p.p.

The increase of the graduation rate of vocational education fluctuated on an increasing trend, partially also as an effect of the measure of extending the duration of compulsory education to 10 years and, implicitly, of the orientation of an increasingly larger number of pupils to the vocational training route by SAM, as compared with the preceding years.

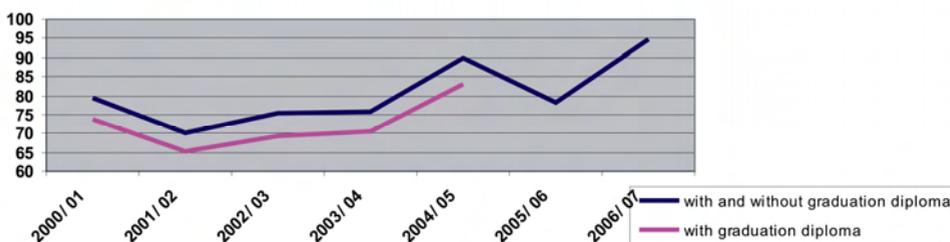
The graduation rate of upper-secondary and vocational education with and without graduation diploma, calculated together registers also a significant

³⁸ Yet, for the proper identification and evaluation of these reasons are necessary expert studies on this topic based on which measures should be adopted with impact at the level of increasing the internal efficiency of the education system, particularly for the vocational segment as source for increasing employment quality.

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increase against the preceding school year, reaching in the year 2006/2007 approximately 95%, the highest value for the entire analysed period.

Graph 5. Graduation rate of upper-secondary and vocational education



Source: Data calculated based on NIS information, 2002-2008. As of the school year 2005/2006, NIS does not provide information about the outcomes of students on final examination.

With respect to tertiary education (ISCED 5 and 6) Romania³⁹ registers diverging developments for post upper-secondary and foremen training which decrease as importance and the higher-education which has a spectacular development, including here the contribution of private entities which are created. The higher employment chances for those with higher-education, in average by 20%, feed the intention of upper-secondary graduates to attend higher education. The youths opt more for higher education than for post upper-secondary or foremen training⁴⁰ and as result,

³⁹ The gross enrolment rate in tertiary education (ISCED 5 and 6) recorded spectacular increases for the majority of the European countries. The highest values (over 80%) are in Finland, Denmark, Sweden, Norway, and Slovenia. The value of the indicator of 45.2% recorded in Romania in 2005 represents an increase almost two times higher as compared with the year 2000, but still places our country on an inferior position in Europe. With respect to the share of students enrolled for mathematics, sciences and technology, Romania was situated in 2003 on a superior position, as compared with other European countries (Latvia, Hungary, Estonia, and Slovenia), the value of the indicator exceeding the EU average – 25.9%. *The ascending trend is maintained also in 2006, recording an increase of 7.5 in the period 2000-2006 – amongst the highest in Europe (EU average – 2.5).* Source: Eurostat (UOE)

⁴⁰ In the period 2000-2006, the gross enrolment rate to post upper-secondary and foremen training recorded a decreasing trend – a consequence of winding up some private education entities and diminished applications for paid attendance. In the school year 2007/2008 the indicator recorded a slight increase from 3.6% in the preceding year to 4.4%. this trend is

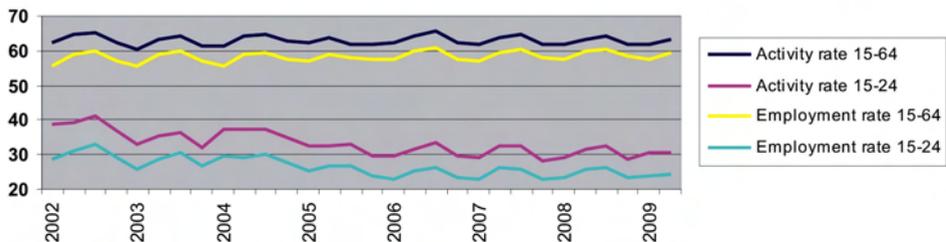
in the period 2000-2007, the transition rate to higher education recorded, in general, an ascending trend from 53.5% in the school year 2000/2001 to 71.8% in 2007/2008, year in which the indicator reaches the highest value.

1.3. Youths insertion on labour market. Main restrictions and challenges

The resulting indicators about the youths' presence on labour market reveal the performance of the education system from the perspective of employability. A brief presentation thereof might define the advantages/disadvantages of the education system from the quantitative and qualitative perspective of final results.

a) **The activity rate** of the population aged between 15-64 years was placed for the last three years around 63%, being higher for men and in the rural area (in 2008 for men it was of 70.6% and for women of 55.2%, in the rural area 64.5% and in the urban are 61.7%) and the employment rate of about 59% and on slight increase. Against the Lisbon targets, the employment rate of the working age population in 2008 places Romania at a distance of 11 pp (70%) and in the case of women at a distance of 7.5 pp (60% the target).

Graph 6. Activity rate and employment rate, 2002-2009



Source: Labour force in Romania- Employment and unemployment, Q2 2009, NIS

If we analyse the **employment rate on educational** levels for the population aged between 15-64 years, we find a diminishment of the indicator's value for those with secondary and higher education, hence, the labour market loses some of the quality of the labour force due to the lower cohorts of youths entering on the labour market and to the international

shown particularly in the case of the female school population that registers an increase of 1.1 p.p., as compared with the value of 0.3 p.p. specific to male population (Annual Report 2008, Ministry of Education and Research).

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mobility of labour force. As fields, the youths between 15-24 years are employed preponderantly in constructions, trade, hotels and restaurants, and those in the age group from 25-34 years in real estate and trade. In average, in the year 2007, 8.3% of the employed population was aged between 15-24 years and 27.1% aged between 25-34 years (in the case of women the shares are much lower, respectively 3.4% and 12.3%). For the same year, from total persons in the age group between 15-24 years 30.5% were active (24.4 employed and 6.1% unemployed) and 78.3% from those aged between 25-34 years (73.2% and respectively 5.1%). From total employed, youths represented under 40%, respectively 7.7% with ages between 15-24 years and 30.8% between 25-34 years. From total employers 1% were aged up to 24 years and 14.9% were aged between 25-34 years. For self-employed the distribution on age groups was of 4.7% and, respectively 17.4% and for unpaid family workers of 18.4 and 23.2%. Men are more numerous on all socio-professional categories, partially justified also by the favourable lifetime of women to have children and hence their lower participation share on labour market.

If we analyse just the age group between 15 and 24 years on education levels, residence areas and on genders, we find the following:

- Even though employed population increased, the number of youths aged between 15 –24 years who are employed diminished. Hence, the employment rate decreased against the year 2000 (35.7%) by 13 p.p., being of 22.7% at the level of the year 2007.
- The lowest employment rates are recorded for youths with a low education level (lower secondary – 14.9%, primary or without graduated school – 17.8%), but also in the case of those with upper-secondary studies (21.2%). In their case the reason might be the continuation of studies on superior education levels for an important share of the respective education level. Another reason is the labour migration with employment in low skilled/unskilled activities in the member countries of EU an not only (in agriculture, public catering, constructions, hotel services, housekeeping);
- The graduates of post upper-secondary and higher education record the highest employment rates (62.3 respectively 64.5%), and the evolution is positive in this case.

74 Table 5. Employment rate of youth 15-24 years old, by educational level, area and gender, in the period 2000-2007

	Total		University	Post upper-secondary	Upper-secondary (incl. tr.I)	Vocational	Secondary	Primary and without school
	number	%						
2000								
Total	1274732	35.7	70.5	67.0	35.6	63.1	26.8	26.4
Urban	488463	23.6	71.5	60.6	29.2	52.6	7.2	6.7
Rural	786269	52.4	66.7	86.0	53.6	73.4	46.9	41.2
Male	733949	40.4	76.5	71.0	37.9	66.6	31.5	31.6
Female	540783	30.7	66.0	64.7	33.7	56.3	22.1	19.5
2001								
Total	1231614	34.9	64.6	69.8	34.2	67.0	25.5	27.1
Urban	478455	23.2	65.1	66.8	28.2	55.0	6.7	10.0
Rural	753159	51.4	62.0	79.1	51.8	78.0	44.9	40.2
Male	706060	39.2	66.7	73.5	37.3	70.5	28.3	34.0
Female	525554	30.4	63.3	67.5	31.5	60.2	22.5	19.0
2002								
Total	1040497	31.3	65.9	66.6	32.2	62.0	21.5	22.5
Urban	434371	22.6	65.2	65.2	27.4	56.3	6.4	9.5

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Rural	606126	43.2	69.5	71.1	46.4	67.6	37.0	31.5
Male	605091	35.6	66.1	62.8	31.5	84.4	24.9	30.4
Female	435406	26.7	65.8	68.6	31.7	39.6	18.0	12.3
2003								
Total	946401	28.7	63.7	59.5	29.4	64.1	19.7	17.6
Urban	407138	21.3	63.9	59.2	26.5	58.9	6.1	8.1
Rural	539263	39.1	62.8	60.4	39.1	69.2	34.2	24.4
Male	566815	33.8	59.5	46.3	32.1	70.0	24.2	24.2
Female	252270	23.5	66.6	66.1	27.2	53.6	15.1	9.7
2004								
Total	980279	29.8	65.2	69.2	30.1	64.3	18.9	21.5
Urban	432772	22.5	65.5	68.8	26.1	60.6	6.5	10.1
Rural	547507	40.1	63.4	70.4	41.9	67.6	32.6	30.4
Male	566116	33.9	65.9	66.1	32.3	67.8	22.5	28.2
Female	414163	25.6	64.7	70.6	28.1	58.4	15.3	16.7
2005								
Total	858480	26.7	64.9	65.9	26.2	63.0	17.3	18.0
Urban	365604	19.2	64.8	67.9	21.6	58.8	5.7	5.9
Rural	492877	37.6	65.4	59.4	40.6	66.9	30.6	26.2
Male	504268	31.0	69.5	68.3	28.6	67.9	20.9	23.8
Female	354213	22.3	61.6	64.8	24.2	55.1	13.7	10.8

2006 (Q4)										
Total	753736	23.2	50.2	55.6	21.0	54.4	15.5	19.1		
Urban	308705	16.4	47.0	62.9	16.4	52.7	6.1	9.0		
Rural	445030	32.4	69.2	39.4	33.1	55.8	25.6	26.3		
Male	444860	26.8	44.6	50.3	22.5	57.3	18.6	24.7		
Female	308876	19.4	52.7	59.8	19.7	48.6	12.4	11.2		
2007 (Q4)										
Total	723169	22.7	62.3	64.5	21.2	50.8	14.9	17.8		
Urban	321382	17.7	61.9	65.7	17.9	51.4	6.2	12.2		
Rural	401787	29.4	65.1	62.5	29.8	50.4	23.6	21.7		
Male	430630	26.5	66.1	57.7	24.5	52.2	17.8	24.1		
Female	292539	18.8	59.3	68.0	18.1	48.4	12.0	9.9		

Note: Exclusively persons left abroad for an undetermined period

Source: ROMANIA – Report on the state of the national education system 2008, Ministry of Education, Research and Youth, www.edu.ro (Data do not include foreign pupils and students).

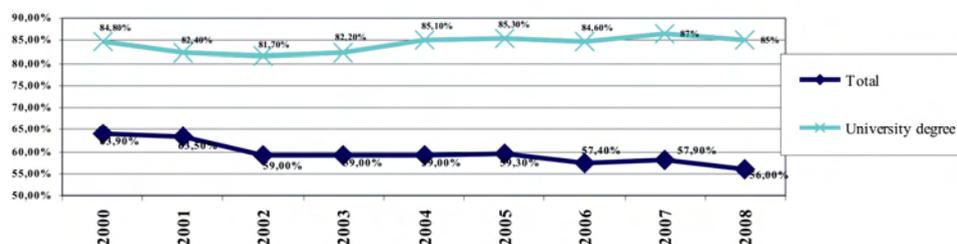
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In the rural area, a sensible higher employment rate is recorded for youths with primary/without studies, lower-secondary and upper-secondary studies. This situation is explained firstly by the fact that in the rural area is provided the opportunity of employment in (paid or unpaid) activities developed in agriculture for persons with a lower qualification level. Closer rates on the two areas of residence (slightly in favour of the urban area) are recorded for the graduates of vocational education (1 p.p.) and post upper-secondary ones (over 3 p.p.). While the youths from the rural area with higher education continue to have an employment rate of over 3.3 p.p. higher as compared with the youths having the same education level from the urban area.

It should be noticed, also, that females have an employment rate about 30% lower as compared with males. Yet, the register an enrolment rate in higher upper-secondary, respectively higher education significantly higher than the one for males, a situation which explains the lower employment rate specific to them. Recent estimates (CEDEFOP, 2008) indicate that until the year 2015, about 30% of all labour places shall require higher education, and almost 50% at least upper-secondary studies, and with a significant decrease of the jobs requiring low qualification levels.

It should be mentioned that professional insertion of a graduate can be influenced by the school where he/she studied, the field of study, the economic environment in the region, the societies/companies where he/she performed practice stages or worked during studies, recruitment companies where he/she sustained interviews, conferences and trainings to which he/she participated. The guidance already during the upper-secondary education of the young individuals towards vocational training and choice of faculty depending on the intended vocational profile for career development, correlated with the aptitudes and demand on the labour market leads inevitably to a higher employment rate of the graduates and low fluctuation in searching an “adequate/satisfying” job according to individual aspirations. As compared with the national average of the employment rate aged between 15 and 64 years, the employment rate of higher-education graduates is higher by about 29 p.p.

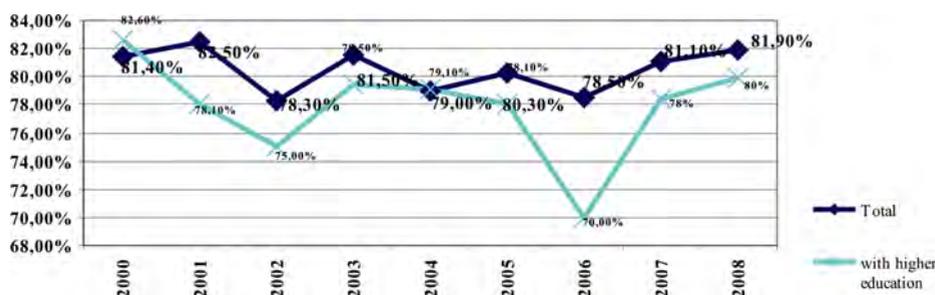
Graph 7. Total population employment rate and employment rate 15-64 years old with university degree



Source: Based on National Institute of Statistics information – AMIGO Survey 2001-2008

Yet, with respect to the insertion rate of higher-education graduates this one is lower as compared with total youths who take a job, and particularly for the first year after graduation, due to the fact that an university graduate shall search longer and be more pretentious about the job, but also because of the legislation with respect to the minimum wage on economy, meaning that employers are not motivated to employ a higher education graduate because the level of the minimum wage is high (2 times until 2009 and 1.75 times more as of 2010 as compared with the minimum wage for an unskilled worker). Even though the state provides fiscal facilities for employing youths (for instance, the employer shall receive for 12 months the minimum wage on economy) due to the complementary conditions (including the obligation to remain with the respective job for at least 2 years) and of the high mobility of youths searching jobs according to their career aspirations, the share of making use of these facilities is very low.

Graph 8. Vocational insertion of higher-education graduates, with ages between 15 and 64 years against total employed youths



Source: Based on information of the National Institute of Statistics – AMIGO Survey 2001-2008

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As a trend, on long-term, graduates of higher education have a higher safety of the job. Another advantage is that compared with the productivity that they generate after their integration into activity they may be considered “relatively cheap” and, in addition, they are more flexible and easier to train on the job. Their major disadvantage is that on entry on the labour market they seldom are able to begin working effectively, requiring a period of training on the job, period which implies costs for the employer.

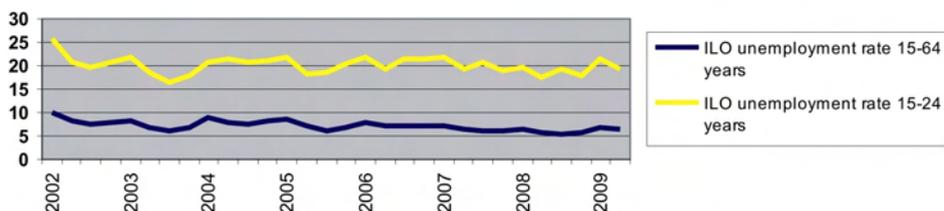
b) With respect to **registered unemployment**, it is found that the rate is lower among those with higher education (2.9% in 2007)/secondary (6.9%) and the highest is among those with low education levels (7.1%). During the period of crisis the share of young unemployed increases (particularly among males⁴¹), for instance the share of those with higher education reaching to about 4.6% in June 2009⁴² (Annex 1).

Young individuals in the age group 15-24 years are faced with the most considerable difficulties of professional insertion. They are more vulnerable, they enter easier into unemployment, particularly if they are fresh graduates or in the first years of their active life when they are still in search of a job according to their professional and personal aspirations or when, due to the reluctance of employers with respect to immediate adaptability and productivity on the job the latter prefer to employ persons with experience, to the detriment of the better educated but less or not at all trained for the active life. Hence, on one hand, the unemployment rate of the young persons under 25 years of age is about three times higher than the national average (2005 19.7%/7.2%, 2006 21.6%/8.2%, 2007 21.1%/7.2% and 2008 18.8%/6.7%), and the long-term unemployment rate reaches up to 10.5% (against 2005 of 13.1%, 2006 of 14.2%, and in 2007 of 13.3%).

⁴¹ Eurostat data indicate that 20,6% from the young male Romanians were unemployed in the period January-March 2009, against 18.6% in the same period of the year 2008. In the case of the young females the rate increased from 17.5% in the first three months of the previous year to 18% in 2009.

⁴² According to EUROSTAT data, in the first quarter of 2009, the unemployment rate among youth in EU increased by 3.7 pp compared with the same period of the preceding year, under the conditions in which the general unemployment rate increased only by 1.2 pp (reaching 8.2%)

Graph 9. Unemployment rate on total population aged 15-64 years and youth unemployment rate 15-24 years



Source: Labour force in Romania– employment and unemployment – qtr. II 2009, NIS

The unemployment incidence is high, the share in total ILO unemployed of the young individuals with an unemployment period of 6 months and over is more than half, on decrease from 2/3 in 2005 (2005, 66.5%, 2006 67.4%, 2007 66.1%, 2008 56.3%)⁴³.

The unemployment rate in the case of young persons aged 15-24 years from the urban area is by 8 p.p. higher than the one corresponding to young individuals in the rural area. The biggest differences on areas can be noticed for the persons with a low education level (without studies, primary or lower-secondary education) – by over 16 p.p. in favour of the population in the rural area. The differences on genders increased significantly, the unemployment rate for men being by almost 8 p.p. higher as compared with the one recorded for women.

⁴³ NIS, Romania in figures, Statistical guide 2009

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Table 6. Unemployment rate of youths aged 15-24 years, on education levels, residence areas and gender, in the period 2000-2006

	Total		University	Post upper-secondary	Upper-secondary (incl. tr.I)	Vocational	Lower-secondary	Primary and without schooling
	number	%						
2000								
Total	291595	18.6	17.4	20.7	23.0	20.6	12.3	17.5
Urban	208431	29.9	16.6	26.3	28.2	30.5	35.8	57.7
Rural	83164	9.6	20.7	5.5	13.3	11.7	7.0	6.8
Male	178997	19.6	12.1	19.5	24.8	22.4	12.6	19.2
Female	112598	17.2	21.6	21.4	21.2	16.0	11.9	13.7
2001								
Total	261412	17.5	21.9	15.7	20.4	19.2	13.0	15.5
Urban	188662	28.3	23.3	18.0	25.2	30.1	38.7	40.7
Rural	72751	8.8	12.3	8.8	11.2	10.2	7.0	8.1
Male	150930	17.6	18.3	11.5	19.6	19.5	14.9	14.7
Female	110483	17.4	24.0	18.3	21.2	18.8	10.4	17.4
2002								

Total	287688	21.7	25.0	20.3	22.7	23.3	18.0	25.8
Urban	181426	29.5	26.0	22.8	25.5	30.1	38.4	54.2
Rural	106262	14.9	20.0	12.3	17.2	16.8	12.8	14.9
Male	167302	21.7	22.4	19.0	17.0	31.1	19.4	22.8
Female	120385	21.7	26.5	20.9	32.5	15.0	15.8	34.0
2003								
Total	214902	18.5	20.5	27.1	20.6	19.5	14.4	20.3
Urban	141917	25.8	21.9	26.8	23.9	26.3	31.2	36.2
Rural	27985	11.9	13.2	28.2	11.9	13.0	10.3	15.2
Male	127316	18.3	26.6	42.2	20.2	18.6	14.8	19.2
Female	87586	18.7	15.9	19.7	21.0	21.5	13.8	23.3
2004								
Total	259853	21.0	20.9	17.4	22.4	21.3	18.3	25.8
Urban	159489	26.9	21.3	16.5	24.6	25.8	37.8	45.1
Rural	100364	15.5	18.3	19.5	17.9	17.2	12.4	18.6
Male	163439	22.4	19.5	22.6	23.2	22.2	20.7	27.6
Female	96414	18.9	21.8	15.1	21.5	19.5	14.6	20.2
2005								
Total	210262	19.7	21.9	18.7	21.6	22.0	15.0	20.4

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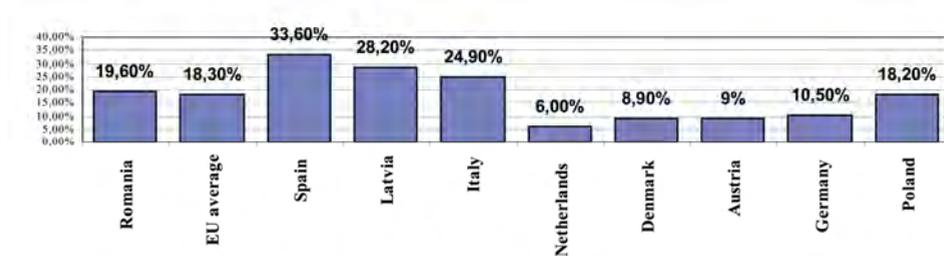
Urban	130485	26.3	21.7	16.6	24.9	26.7	32.5	38.3
Rural	79766	13.9	22.8	25.7	15.4	17.7	10.1	14.2
Male	130248	20.5	21.1	17.8	23.7	22.6	14.9	23.0
Female	80014	18.4	22.5	19.1	19.4	20.7	15.2	12.3
2006 (Q. IV)								
Total	206616	21.5	34.2	14.3	25.2	19.4	16.6	26.0
Urban	126664	29.1	37.0	13.6	27.8	25.4	29.7	54.9
Rural	79952	15.2	20.5	16.9	21.7	14.2	12.4	12.5
Male	126295	22.5	40.8	19.0	26.3	19.3	18.9	25.6
Female	80321	20.6	31.3	10.9	24.1	19.5	12.9	27.1
2007 (Q. IV)								
Total	168783	18.9	21.6	2.5	19.8	19.8	14.6	29.5
Urban	96946	23.2	22.4	3.9	20.5	23.9	26.8	41.2
Rural	71837	15.2	15.9	0.0	18.7	16.4	10.7	23.5
Male	120256	21.8	20.2	7.7	21.7	22.7	18.8	31.0
Female	48527	14.2	22.8	0.0	17.3	13.4	7.5	24.5

Source: ROMANIA –Report on the state of the national education system 2008, Ministry of Education, Research and Youth, www.edu.ro

Data calculated based on NIS information (AMIGO Survey 2001-2005, Q. IV 2006 and 2007).

The period of the financial crisis triggered a more marked increase of unemployed among young persons, but it should be noticed the low share of unemployed in total. Unemployment among young persons' increased significantly in the period of the financial crisis, not only in Romania, but also in many EU member countries. If in Romania, at the half of the year 2009 was recorded a youth unemployment rate of 19.6%, in Spain, Latvia and Italy this was between 25 and 34%, and in Poland somewhat more over 18%.

Graph 10. Share of young unemployed at the half of the year 2009



Source: Eurostat

From the data presented we could determine that the labour market, respectively the business environment shows more exigencies towards the young labour force entering the labour market upon graduation. Young individuals find with difficulty a job adequate both from the professional and income viewpoint, a reason for which the fluctuation from employment to unemployment, and the reverse, as well as longer periods of unemployment are an important barometer of the reform of the lifelong learning system in Romania. In addition, the information about vocational training courses, or courses for adjusting to the job can offer information about the dysfunctions and correlation failures between the education system and labour market demand (unfortunately, such information are not systematically recorded and they can be currently obtained only by way of thematic statistical surveys, as the ones in Annex 2, for instance)⁴⁴.

⁴⁴ Therefore, it is necessary that universities, by their representatives to provide much more information about the employment or continuing studies opportunities to their own students. We draw attention to the weak level of information that is provided by the universities about professional insertion. There are studies and tops, hierarchies of the higher education institutions from Romania realised by the Academic Society from Romania, the magazine Capital, the Coalition for Clean Universities, etc. Yet, the first to

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Information about the transition from school to labour market was obtained by National Institute for Statistics through a special survey in the year 2000 (Q 3)⁴⁵. Still, we could remind the thematic studies realised by various institutions by means of projects financed from domestic or international funds, but these provide only partial, fragmented images related to the problematic of young graduates on the labour market⁴⁶. As result, there is no relevant information data bank that would support the education system to adjust/adapt permanently the educational profile to the requirements of the business environment, and the market allows only for punctual regulation on short-term particularly through CVT courses, which do not solve the issue of the anticipative character of the education system against the labour demand expressed by the real economy. Only in the second quarter of 2009 the statistical research with respect to young people's access to labour market was taken up again.

The transition from school to active life and the integration into work of youths represents an essential issue with a strong economic and social impact being at the same time **an important estimate of the external efficiency of the education system**. Unfortunately, there are large

take into account only the opinion of the graduates and employers in measuring the confidence and satisfaction degree with respect to the educational supply is the study "University Ranking" realised by the German company Kienbaum Management Consultants in cooperation with the magazine Capital. The respondents have graded the universities with qualificatives, starting from 1 for very good, to 4, insufficient. The classification was made based on several criteria: theoretical education, practical orientation, language skills (foreign languages) and international experience. As result of these intermediary rankings the general ranking was realised. <http://www.capital.ro/articol/exclusiv-topul-universitatilor-din-romania-125346.html>

⁴⁵ AMIGO, Supplementary Survey "Transition from school to labour", Q III 2000, NIS. The survey considers the population aged between 15-35 years and details aspects of the transition from the education market to the labour market. Due to the significant developments in the period of the almost 9 years from the survey, its outcomes are less relevant as dimension, but we believe just as important as qualitative analysis attributes about the current situation on labour market. The next survey was realised in 2009, but at the time of elaborating the study, the results were not yet published.

⁴⁶ We remind just a few of these: Nicolescu, L (2002) Contribution of Higher Education to the transition towards the market economy: The case of Romania In K LIUHTO & J JUMPPONEN (Ed) *Ten years of Transition*; D. SĂPĂTORU, A. CAPLANOVA & S. SLANTCHEVA (2002) *Estimating the value of public and private higher education in Central and Eastern Europe: Labour market outcomes and institutional forms in Bulgaria, Romania and Slovakia* (Report to PHARE ACE P98-1020-R project), Romanian University System 2007 - SOROS Foundation Romania

differences on education levels with respect to the **development and application of monitoring systems for the graduates.**

There are no systemic studies, nor a national data bank of monitoring socio-professional insertion of graduates on the labour market during the first years, by highlighting the dysfunctions of forecasting the educational content and, also, there is no adequate system of indicators that would allow an evaluation of the university system's impact on the Romanian economy and society⁴⁷. There are only fragmented studies, at the level of individual universities without any attempt of aggregating the results.

**Box 1. Concerns regarding the monitoring of education outcomes.
Good practice examples**

The most advanced from this viewpoint seems to be vocational training, where the outcomes are expected for the initiative within the PHARE TVET Programme which developed and applied a methodology of evaluating vocational insertion for the graduates of vocational and technical education (SAM, supplementary year and technological upper-secondary). Even though the survey (the outcomes of which are about to be finalised) was realised only at the level of the Bucharest municipality and of the county Ilfov, the expected outcomes are of particular importance considering the provided feedback for the education system with respect to its level of adjustment to the requirements of the labour market, as well as from the perspective of the motivation for participating to lifelong learning, as failure of integration on the labour market could have important repercussion on it.

At the level of university education in the last years were realised monitoring and analysis studies about the education efficiency from the viewpoint of labour market requirements.

(a) At the level of the Academy of Economic Studies from Bucharest should be mentioned the study which presents among others the employability of graduates into jobs according to their training, but also about how employers perceive university education: good theoretical training, openness to new,

⁴⁷ Order no. 6012/21.11.2008 for approving the Methodology and working instruments regarding the monitoring studies of labour market insertion of higher-education graduates from Romania <http://www.edu.ro/index.php/articles/11137>. The substantiation for the order was: 1. The necessity of monitoring the social-professional insertion of graduates; 2. The intention of the Ministry of Education, Research and Youth to enforce the methodology by means of a pilot project initiated through SOPHRD. The target group is represented by graduates of higher education institutions either public or private, at one and after five year since graduation, but only for the universities participating in the implementation of the study. The working instrument: questionnaire.

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adaptability but also lack of practical experience, a certain lack of initiative, difficulties with respect to teamwork (Source: Nicolescu L (2007). The evaluation of education efficiency within the Academy of Economic Studies from Bucharest, Romania, Ed AES Bucharest) .

(a) The project realised by the Alumni Foundation of the University “Alexandru Ioan Cuza” from Iasi considers the realisation of study about the employability of graduates. It is pursued to realise a detailed data bank about the graduates and to identify the trends with respect to employment ways at the level of the main employers in the Moldova area. The preliminary results of the survey about the professional insertion level of the graduates 2008 indicates that 90% of the respondents have already a job under the conditions in which 56% worked already during their university studies. It should be noticed that already in the preceding year the graduates complained about the lack of workplaces in the field of graduated studies, not corresponding to the large number of graduates and the lack of experience requested upon hiring, etc. (Source: <http://alumniuza.org/proiecte/programe.html>);

(b) At the University “Petru Maior” from Târgu-Mureş, was realised such a study for the promotion of 2007 of the graduates of the Faculty of Sciences and Languages. The outcomes were the following: 94% of the graduates are employed in the first year after graduation, from which 82.25% in the studied specialty under the conditions in which 47.14% of the graduates were employed already during their period of studies. (Source: http://www.upm.ro/career_center);

(c) In the Report about the insertion degree on labour market of the graduates of the University of Bacau, promotion 2008, after the first year since graduation is highlighted the following: 85% from total respondents found a job, 74% work within the graduated field of studies, and 72% are employed in a job corresponding to their training level

Source: <http://www2.ub.ro/ub/document.php?d=bi-200901>

The outcomes of the survey from 2009 associated with the reform measures on both markets (education and labour) allow for formulating some conclusions/outcomes and might represent references for defining the improvement framework of the relationships/communication channels between the two systems/markets (Annex 3).

Box 2. Performances of the youth insertion on labour market (Q II 2009)

- **The insertion rate** on labour market of the persons aged between 15-34years who ceased education, irrespective when, in the period preceding the period of realising the supplementary survey, was of **24.4% at 6 months since concluding education** and of **33.6% one year after ceasing studies;**

- **From the graduates of higher-education 60.9%, had a job while the share corresponding to those with secondary studies was of 35.0%, respectively of 14.6% for the persons with a low education level;**
- **39,6% of the persons residing in urban area had a job against 26,3% for those in the rural area;**
- **one or another training form within the national education system was pursued by 32.9% from the individuals aged between 15 and 34 years. The participation to education was more marked for persons aged 15-19 years (83.3%) and for those from the age group from 20-24 (45.6%);**
- **82.0% from total youths exiting the national education system had at least one significant job up to the date of developing the survey (54.9% men and 56.8% resided in the urban area);**
- **In the first job the majority of young individuals were employees (75.6%) and employed on a full-time basis (92.1%);**
- **between concluding studies and starting activity at the first significant job, 74.1% searched for a job using active methods (direct contact of employers or of the factors responsible for hiring -37.9%)**

Source: (AMIGO) in quarter 2 2009, Ad-hoc Module about Youth Access on labour market (Press release no 237/ 3 December 2009), NIS

The most significant are:

- a) Young individuals entering on the labour market after graduating secondary or higher education live preponderantly in the urban area and men are more numerous; access to tertiary education is higher for those in the urban area, opportunities are closer to the beneficiary and often financial restrictions are the most important;
- b) the shares of their employment and unemployment against the age group to which they pertain did not undergo relevant changes, same as the transition rate to higher education which improved but not in a significant share and, unfortunately did not generate a similar improvement of the quality of graduates' education, but to the contrary;
- c) the diploma is still more important than competencies and proved knowledge, especially within the public sector. The business environment becomes gradually more rigid from this viewpoint and requests on employment professional certification by competencies, and in their absence the employment is made for a job requiring inferior training and/or the knowledge deficit is compensated through CVT on the job;

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- d) the activity rate decreases, youths postpone entering on the labour market on one hand by attending several faculties (sometimes in completely different fields) or they continue their studies in masters/doctors systems, or on the other hand, after graduation (or abandon) they work on the black market or migrate for labour on low skilled jobs, inferior to the obtained education;
- e) the main reasons of school abandon are yet of actuality, respectively the high cost of schooling (particularly for those from the rural area) and/or associated with the need of working for incomes (dependency on families with low incomes and other types of difficulties). An important reason of failure to finalise studies is represented also by the inefficiency of the evaluation/certification systems upon graduation which consider inflexible evaluation schemes less adjusted to the practical finality of education – verifying knowledge instead of certifying competencies, etc.;
- f) the lack of a flexible system of continuing training, which should be coherent and accessible to all, including by certification/continuation/transition from the formal to the informal and non-formal one;
- g) another difficult to measure issue but particularly relevant under the aspect of compatibility between the education market and labour market, between chosen career and competencies for practicing it under performance conditions is represented the analysis of the “first significant job” – under the aspect of the professional profile and search duration;
- h) finally, an important aspect of individual performance during the active life span is constituted by the informal education related to behaviour on labour market and career development. The example of parents and extended family might define to a significant share the behaviour on labour market of young graduates and their career path.

Lack of knowledge about such aspects in a systematically manner and their analysis influence the feedback processes within the educational system, maintaining dysfunctions and gaps between the education market and labour market, made finally concrete by human capital, investment in education, and potentially value added loss as result of unsuitable work or of abstaining to work after graduation.

The relative high level of the young individuals' unemployment rate **highlights the necessity of a closer link between the education and training system and the labour market.** Finalising and applying the monitoring methodologies of insertion of the graduates of various education systems (vocational, upper-secondary, tertiary) is a priority, as well as developing more flexible and efficient systems of organising practice for pupils/students. Last but not least, a more careful analysis is to be expected about the competencies that employers in Romania regard as important for the success of their companies and adjusting the educational and training supply, along with periodical updating of employment and vocational training standards and of the educational curriculum in close dependency with the dynamic of changes on the labour market.

1.4. The economic-social context – as adjustment factor of young labour force supply considering knowledge, competences and aptitudes obtained through formal, informal and non-formal education

Building up some functional mechanisms and adequate policies of stimulating youths' transition on labour market and their employment under performance conditions depend to a large extent both on the efficiency of education's sub-systems and of the ones of the labour market, but also in the influence on the economic-social environment. The two sub-systems, even if apparently separate, are interdependent both one against the other, but also together against the economic-social and cultural environment which might sustain them, or to the contrary. The culture of working for own welfare, habit and awareness of the necessity of learning to have performance and access to information associated with the support of the community are the parameters determining the practical acknowledgement of obtained education by productive performance.

During the transition period the three components of the national education system – pre-university education, university education and CVT – underwent specific reforms from which some are still under development pursuing own objectives related to outcomes and quality. **Correlating the developments/reforms of these sub-systems was lacking or on some segments and period even absent which had as result that these – developed autonomously – turned rigid in the moment of their interaction.** The expected effects were weak or adverse and, for the last years, including on the background of assimilating the acquis communautaire, of assuming the Lisbon targets and of taking over the Bologna system, the dysfunctions between sub-systems and the weak

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quality within them pressed again towards global rethinking/reconstruction. Initially, adjustments were attempted, alterations yet without the expected performances. Additionally, the support of public authorities, including of the financial ones, was not enough.

The allocations for education, even if increasing in the last years did not succeed to completely redo the system. The institutional construction had to suffer with respect to labour market but also to labour market. Romania in the last decade underwent a favourable period to developing education and labour market reform. The gross domestic product after 2000 knew significant annual dynamics between 102.1% and 108.5%, and the year 2008 recorded the most considerable growth dynamic within EU-27.

Table 7. Development of main economic indicators, 2000-2008

Indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008
GDP (preceding year=100)	102.1	105,7	105.1	105,2	108,5	104.2	107.9	106.2	107.1
Share of private sector in GDP	65.6	68.0	69.4	67.7	71.5	70.1	71.6	72.2	70.8
Dynamics of net investments (2000=100)	100	109,6	120.2	133,7	147,1	163,0	195,1	235,9	276.2
Education expenditures as % in GDP	3,4	3,6	3,6	3,5	3,3	3,5	4,3	5,5	6

Source: NIS, 2009

The gross domestic product per capita (PPS) increases to 10500 Euros in 2007 and 11300 in 2008, the investment rate (as ratio between gross fixed capital formation and the gross value added reaches to 29% in 2006, 34.3% in 2007 and 37.3% in 2008. The contribution to GDP is in a share of almost 50% pertaining to services (49.5%) and 22.9% to industry (constructions contribute by 10.5% and agriculture by 6.5%). The share of the private sector increases to almost 71% (from which 48.8% represent private services, 28.1% private industry, 14.5% constructions and 8.6% agriculture). The investments realised within the national economy in the year 2008 represented an increase by 176.2% against the year 2000, new construction works recording a superior dynamic (220.3%) and those for tools and transport means 173.5%. The concentration of investments was in industry (33.7%) and in services (44.9%). The index of real earnings

exceeded in the last years the level of the year 1990, and the unemployment indemnity for graduates of education institutions represented 46.7% from the gross average wage on economy in the year 2008.

On the background of economic growth after the year 2000, Romania continued the trend of increasing the funds allocated for education, succeeding to be significantly closer to the average of the EU member countries with respect to the public expenditures for education, as % from GDP. Based on the budget for the year 2008 for education, % from GDP had the value of approximately 6% which represents a level close to the European average. From total public expenditures, education uses about 18%, the most part being allotted to pre-university education.

Table 8. Public expenditures for education as % from public expenditures - 2007

	Amount (million Lei)	% from total public expenditures
Total expenditures education	21244.9	17.54
Pre-university education expenditures	16545.5	13,6
Higher education expenditures	4699.4	3,9

Source: Ministry of Education, Research and Youth, 2008, NIS, 2008

Leaving aside these public expenditures through the education system, significant funds are used for continuing vocational training which are born by companies and/or individuals/beneficiaries or come from various financing on programmes/projects or donations or from funds of some NGOs. In addition, from the unemployment fund are used about 2% annually for vocational training of unemployed. As result, the total financial effort for education and training is much higher, but there is not yet a system of centralising all such information.

Chapter 2. DEVELOPMENT OF THE EDUCATION SYSTEM DURING THE FIRST DECADES OF TRANSITION. QUANTITATIVE AND QUALITATIVE ASPECTS

Next to the demographic phenomena, education represents a factor of restricting the size of labour market and the quality of the labour supply. Continuing vocational training heightens the entry capacity on the labour market and of maintaining labour performance and represents for youths an adjustment form to the requirements of active life. During the transition period, all segments of the national education system and of continuing training were reformed, currently this process being in various stages for each sub-system. The reform continues, as recently a new package of education laws was realised with the purpose of ensuring performance and quality in education and of bringing closer school to labour market.

The quantitative and qualitative dimensions of the education outcomes previously presented are completed by the following parameters:

- a) the school population of Romania for the year 2008/2009 counted over 4.3 million persons to which are added the graduates of CVT courses or the ones who train within formal and informal systems. The total annual size of the population contingent in training differs depending on a complex of factors which include: entries by demographic evolutions, the necessity of training generated by the requirements of the labour market, respectively additional training after the entry on the labour market for improvement and career development/change, as well as individuals who, within the formal and informal system gain knowledge, competencies and skills for labour and active life which subsequently may be acknowledged by the existing systems of vocational certification;
- b) the system of initial education includes the education entities from Romania within which initial education takes place and the number of which decreased by 30% as result of reorganising the network, during the restructuring process 8221 educational units in the school year 2008/2009, as compared with 11865 in 2005/2006). To these are added the market operators for CVT and social stakeholders promoting education in informal and non-formal system. The link and equivalences between these,

between the finality of education/training promoted should be made by a unitary system of evaluation and certification that currently does not exist (each sub-system has its own algorithm of evaluation/certification and the equivalence between these or the mutual recognition is done only as an exception);

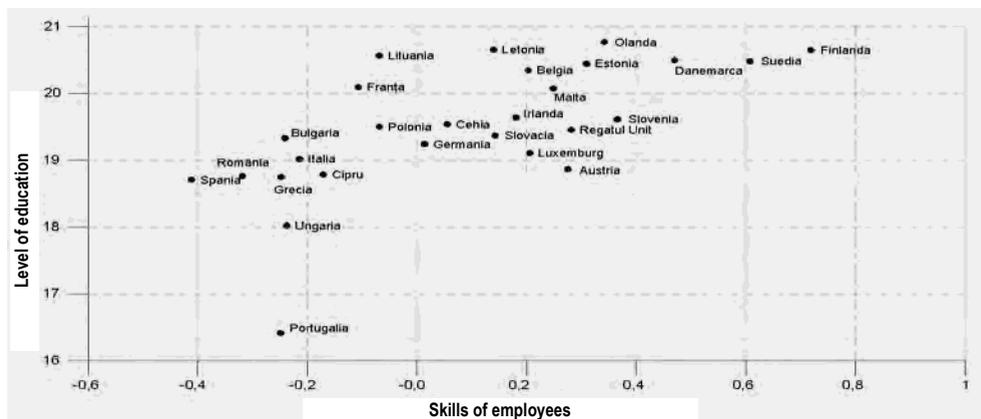
- c) **the average school-life expectancy** was in Romania (in 2006) of 15.6 years against 17.2 years in EU-27, recording a slight increase due to the development of tertiary education and of developing the masters and doctors system based on the Bologna principle(3+2+3);
- d) **the share of population aged between 15-64 years comprised in education at all levels was of 47.5%**. Women participation is higher than for men by 4.6 pp per total education system (82% for females and 77.4 for males), being higher in the case of higher education. If the number of students by 10000 inhabitants decreases on the background of the demographic evolutions from 1386 in 2005/2006 to 1293 in 2008/2009, in the case of students the number increases by over 25% (414 in 2008/2009);
- e) **the share of pupils with level 1 (and under level 1) knowing the Romanian language (benchmark 20% up to the year 2010)** at the level of the year 2000 was in Romania at **the highest level from Europe (41%)** , while the EU-15 average was of 17%.

An overall estimation on the quality of education in relationship to the labour market exigencies might be realised by the average of aptitudes, labour experience and the level of education of the labour force present on the labour market. Even if such evaluations are not available also for the young labour force segment, we consider that the presentation of Romania's situation as compared with the one from other EU Member States provides a **relevant image on the qualitative level and of the needs with respect to labour market education.**

From the viewpoint of employees' aptitudes in relationship to the education level, Romania is placed on an unfavourable position in the classification of EU member countries, being in the category of weak performance countries: Portugal, Spain, Greece, Hungary, Cyprus, Italy and Bulgaria.

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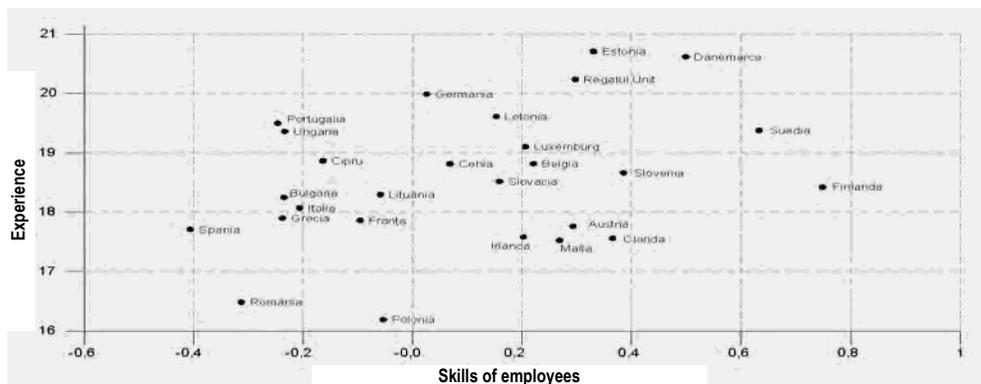
Graph 11. The average of skills and level of education among employees



Source: EWCS, 2005. Study conducted by the EWCS Foundation (European Working Conditions Surveys), based on a survey on work conditions in Europe (every five years -1990, 1995, 2000, 2005). The survey also includes Romania, since 2005, the year when the number of countries included in the research reached 31. The following survey will be conducted in 2010.

As result, the education system from Romania does not succeed to create and promote an education level that would train the graduate for the labour market, for an increasingly higher productivity and associated with adequate incomes.

Graph 12. Average of skills and experience among employees



Source: EWCS, 2005

Such weak performances recommend the necessity of a critical analysis about the current education system for the labour market and the identification of instruments, mechanisms and policies of rendering efficient the system of lifelong learning as support of diminishing the gaps between demand and supply of knowledge and competencies for the labour market.

Without entering into details, we will present **the main stages/reform measures of each sub-system** that have incidence on the training of graduates and youths for active life and labour market.

2.1. Pre-university education – with a role in the vocational guidance and competencies training

Pre-university education underwent a long reform period⁴⁸, having as purpose to adjust labour force supply not only to the requirements of the labour market, but also in accordance with the personal profile, with the individual potential of career development. During the first year of transition, pre-university education developed relatively chaotically, without links to labour market, with the necessities on it. Theoretical colleges had a better image than the one of industrial colleges, without it being always proved by the performances, and partnerships with the industrial environment diluted a lot on the background of failing to understand the new criteria and demands of the market. Learning technology was rigid based on accumulating to the detriment of competences, and aptitudes, finite, pre-manufactured cognitive products were offered which were based on the reproduction capacities of the pupils. The market “certified” these developments by increasing the number of unemployed **with ages between 15 and 24 years to over 20%, respectively the double as compared with the national average, the main reason of unemployment being the lack of practical competencies and aptitudes required in production.** The objectives of the pre-university’s system reform took into account: the shift to a reactive, proactive and coherent policy, which was not limited only to reparatory and compensatory decisions, taken only in the moment when a crisis emerged; inclusion of continuing vocational training in all human resources development programmes; expansion of inter-sectorial policies; encouraging social partnerships; diminishing the gaps and dysfunction

⁴⁸ A detailed presentation of the reform of the system is found in a previous EIR study in this field. Study no 2/2008, SPOS - Valentina VASILE, Gheorghe ZAMAN, Steliana PERT, Felicia ZAROJANU (2008) – *Restructuring the Romanian education system from the perspective of domestic market developments and impact on research progress*, European Institute of Romania, Strategy and Policies Studies

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between initial and continuing training; realisation of some continuous analysis studies of labour market needs; correlating the vocational training standards with the vocational standards; putting to good use information and competencies obtained in career information and guidance centres; supporting individuals and socio-cultural groups with special needs; launching training the trainers and managers' training programmes.

The necessity of increasing the participation to labour market of secondary education graduates and their active integration on the labour market triggered measures within the reform process for **increasing participation to secondary level education, implicitly to initial vocational training – as of the school year 1998/1999**: monitoring participation to education and identifying the reasons of social exclusion; institutionalisation of the social partnership between school, local public administration and parents' association; increasing the system's flexibility by creating the opportunity of continuing studies in colleges for the graduates of vocational schools. These changes were generated on the background of accepting the need of a new approach about pre-university education, of the relationship between school and society, and a clear definition of expected finalities for each educational segment: compulsory education should develop the knowledge desire and of continuing training, receptiveness towards the change dynamics, the creative and entrepreneurial spirit, openness to novelty and to the outcomes of research-development outcomes, and the reorientation of the **academic-type education** towards pragmatic milestones, that would allow an evaluation against the competency standards. In this context, the curriculum should be constructed so as to ensure the performance standards certified by the society by creative learning⁴⁹, and by adjustment to the community's necessities⁵⁰ and development with its support, as well⁵¹.

Pre-university education is finalised with the evaluation and certification on each training stage, respectively: certification of graduating

⁴⁹ **Shift from reproductive to creative learning** by changing the learning contents and innovation supported by didactic methodology (replacing frontal teaching, with the entire class with the personalised teaching and activities on groups, and replacing teacher's monologue with dialogue and class debates).

⁵⁰ **Curriculum according to school's decision shall** express the needs of the community, transposed by school in own programmes, facilitating the responsibility of local authorities and of parents against the quality of the educational act.

⁵¹ **Partnership between school and community /society** actual and efficient, and the relationship of the partners should embrace the form of mutual support for a knowledge-society closely linked with the local and regional development objectives.

general compulsory education – **capacity certificate**; certification of graduating upper-secondary education (**baccalaureate diploma and vocational competencies certificate**) and **certification of graduated studies** (accompanied by the „student’s records transcript”, on demand), in the case of disrupting college education; **certification of vocational training** by means of the **qualifications’ diploma** (vocational education), by a **qualifications certificate** (apprenticeship schooling) and by the **vocational competence certificate** (post upper-secondary and foremen training).

Currently, the pre-university education system does not ensure the training of youths for the labour market but by exception. The education of young individuals for life is lacking, showing partiality towards knowledge accumulation and only to a small extent towards practical aptitudes, and competencies training, etc. There are some sectorial progresses but the reform measures still do not prove their efficiency within the economy.

As result, the deep changes of the last years pursued to improve performances of the system in order to ensure basic competencies, fundamental general training required by the individual in order to actively integrate within the society. This reform process was realised under conditions of under-financing the system and of promoting some legislative changes/additions while often were insufficiently correlated with other economic-social measures and/or even to the reform of the system. The main directions of reforming the pre-university system took into account: the duration of compulsory education and the contents of training on this segment, reorganisation and diversification of the specific paths of the vocational and technical education in view of approaching the Lisbon Agenda targets and of ensuring the fulfilment of the educational standards by the pupils/graduates (PISA-test, for instance).

An important step in bringing closer school to life, to the requirements of a performance active life was represented by the National Pact for Education (2008) in which was determined as strategic objective **“the change of the school as system for sustainable generation of a highly competitive national human resource fit to efficiently operate within the present and future society”**. Thereby the educational system turns into an active instrument for ensuring the development of a potentially performing labour force. In fact, a clear reorientation towards the beneficiary takes place, towards his/her needs of knowledge, competencies, skills under the conditions of promoting social inclusion by educational opportunities and, subsequently employment. Satisfying current needs

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and/or perspective ones of the labour market by education, particularly by pre-university education will allow the training of a labour force apt to answer to the permanently changing requirements of the labour market and open towards permanent education as support for performance on the labour market and career advancement.

*The quality of education is low and on decrease, 53.5%*⁵² of the Romanian students being under the level of functional literacy⁵³. Against the evaluation of 2000 a school performance diminishment is registered. It should be mentioned that the PISA Report 2006 highlights a high variation between the outcomes obtained by pupils in various schools and finds the persistence of some substantial performance gaps for the students originating from the disfavoured segments of the population.

The TVET Reform changed the vision of secondary education, but its enforcement is delayed the largest part of the secondary education being based on theoretical classes, laboratory activities or school workshops being very low and only for some fields. The school programmes provide a much too large knowledge-package, centred on memorisation, without succeeding to develop accordingly for the children the basic and functional competencies, respectively a positive attitude towards learning and participating to active life in a performing manner. As result, the link with the labour market is only of a declarative nature the graduates having to pursue training courses in order to be able to take a job.

A SWOT analysis of pre-university education allows us to identify the gains from previous stages of the reform. Hence we can mention: the increase by two years of the period of compulsory education (10 years) and the development of some educational routes for vocational and technical education on the idea of returning progressively to the technological route (the arts' and trades' school + completion year + technological college), thus ensuring the equality of opportunities for all graduates of primary education to pursue their studies up to university education; the transition to the training standards and credits' system and the implementation of some integrated planning models/systems of the

⁵² See "PISA 2006 - Scientific Competencies for Tomorrow's World" vol. 2, OECD, 2007.

⁵³ Up to 2005, there was no explicit system, all comprising and unitary at national level for ensuring the quality of education. Under these conditions, the references to relevance and, respectively quality of education and vocational training could be made only based on external evaluations. The evaluation realised in 2006 according to the methodology of the Organisation for Economic Cooperation and Development (OECD) in the PISA system (Programme for International Student Assessment) for the general performance of youths aged 15 years places Romania on the 47th position out of the 57 participating countries.

educational supply based on analyses and inter-institutional cooperation, at local/regional level (PAS, PLAI and PRAI). The change of the curriculum also generated the improvement of the teaching methods, to developing organisational culture at the level of the educational institutions. Finally, the demand for continuing studies increased.

The reformed yet not finalised system, in practice, has still a lot of deficiencies from which those related to the labour market refer to: the lack of long-term vision, particularly at the level of the school programme, of the curricula and of the expected finalities; the absence of some quantitative and qualitative measurements that would allow for the periodical evaluation in order to adjust the functionality of the system and the enforcement of some educational policies adequate to the pursued objectives; insufficient promotion of the cultural diversity and education in this spirit; institutional management is inadequate with respect to the need of flexibility and to the particularities of each entity; the access to basic and key competencies training is still difficult, as result of the lack of coherence between educational systems/stages with respect to responsibilities' distribution that would allow, upon graduation the assimilation on one hand of key competencies and on the other hand of the skills for using ITC; the institutional infrastructure is not adjusted to the modern learning techniques and the teaching staff is not trained to use them; the necessary link between technological colleges and the business environment is inexistent, there are no instruments or adequate channels of transition from school to the labour market and also the cooperation between school and the local community is lacking.

The current deficiencies of the system could be removed by instruments of ensuring quality and adequate cooperation mechanisms, including financing by the business environment and the civil society and implementation of the national qualifications' framework. Secondary education must be approached as a link in the permanent education system and therefore educational institutions/schools should be treated as **community resource/learning** centres, by diversifying the supply of educational products and services for the local and regional community, by opening the school towards the educational needs and interests of some wide categories of individuals, as stage of the educational path for the labour market.

The significant gap between knowledge supply and gained competencies through the system of initial education and the needs of the labour market have diminished the confidence in the actual correspondence between obtained certificates and diplomas and the real knowledge and

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competencies of the graduates who, on concluding studies, must continue learning for gaining practical competences and skills. This education autonomy at secondary level, with much to less openness towards the next learning channels – on the job by practical activity, or within the specialty higher education, makes learning unattractive as process with implications on the quality and subsequently its certification, either by employment within the business environment, or by passage to higher education.

2.2. Higher education – a source of highly skilled human potential and with an educational profile compatible with labour market demand

Higher education developed rapidly in Romania, but has lacked functional agreement between the educational supply and the demands of the labour market, which is insufficiently defined as far as specialities and curricular performance are concerned. The relevant parameters⁵⁴ for defining the dimensions and quality of the system in view of improving youths' and graduates competencies take into account:

- *the significant increase in the number of higher education institutions*, from 56 in 1991/92 and 63 in 1994/95 and a leap to 95 in 1995/96 (due to the massive entry of private organizations on the market) and a maximum of 126 in 2000-2002. The increased competitiveness on the higher education market, as well as the introduction of the certification/authorisation and assessment system have caused a slight decrease in the number of academic establishments, reaching a total of 98⁵⁵ in 2008/2009. The size of these establishments has also increased, reaching a total of 755 faculties (three times more than in 1991/1992) and the average number of students for each university has grown from 3471 in 1990/91 to 9145 in 2007/08;

- *the number of students per 10000 inhabitants has increased* from 83 in 1991/92 to 448 in 2008/09⁵⁶, even though tuitions have been constantly increased, but the quality and demands have decreased

⁵⁴ Source: www.insse.ro/cms/rw/pages/index.ro.do - Statistical Yearbook

⁵⁵ Some specialists consider that the number of universities is too high comparing with the situation from other countries. For example, France with a population three times larger than of Romania has less number of universities

⁵⁶ The number of students has continued to grow excessively and, as then Minister of Education Mircea Mică stated in 2005, „Higher education is collapsing, because the academic supply is higher than the number of potential applicants”

significantly⁵⁷. Such dynamics in the number of students has been accompanied by a growth in the number of the teaching staff, with the inevitable addition of people with poor teaching skills or insufficient knowledge (partly because of unsatisfactory wages for specialists). This unhealthy increase of the number of teaching staff, especially for the positions of associate professor and professor, has been brought to a halt by the introduction of their authorization and assessment system, based on academic performance criteria in academic research and national, as well as international visibility. **The number of students for each teacher almost doubles**, from 14 in 1990/91 to 26 in 2006/07 (11 at Cambridge, 13 at Oxford in 2005/06);

- *the private system is constantly attracting a growing number of high-school graduates*. The number of high-school graduates who choose to continue their education in a public university has followed an upward trend until 2000, maintains at a constant pace until 2006/07 and then descending as of 2007/08. The private system has had a constant growth until 2004/05 and thereafter records a strong growth. Thus, while public higher education is experiencing its first year of decline in the number of students, private institutions have managed to double their number of students in just two years. **The ratio between public system students and private system students has dropped from 1 to 2.5 in 2000/01, to 1 to 1.4 in 2008/09**. One explanation would be that an increasing number of applicants wish to further their studies, whereas no public universities have been established of late, thus leading to an increased demand for private institutions.

- *the finished product of higher education in our country – the graduate – does not always possess the knowledge and competencies required on the labour market, and our national higher education does not always meet the European quality standards*. International rankings underline this particular problem, and the labour market is in dire need of specialists, a service most universities cannot provide at the moment. There are multiple causes for this, but quality certification plays a very important role⁵⁸. Quality certification implies both institutional assessment considering

⁵⁷ Basically anyone who graduates from high-school goes to university, often oblivious of the influence or importance of these studies for his or her future

⁵⁸ The establishment and European acknowledgement of the Romanian Agency for Quality Assurance in Higher Education (ARACIS) can lead to proper quality assessment in the field. Thus, ARACIS has been registered in the European Association for Quality Assurance in Higher Education, (EQAR) and was recognised as a full member of this association.

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the assumed standards compatible with the European level ones, but also student assessment, respectively testing competencies related to creativity, initiative, logic thinking, entrepreneurship, etc. The labour market distribution is not supported or promoted by higher education institutions, since they do not create a description of the student, with aptitudes, skills, competences and education level to be considered by prospective employers.

- ***the Romanian higher education system lacks the capacity of retaining well-trained, performance students*** as they very often leave in order to continue/finalise their studies abroad. The labour market doesn't have neither instruments for attracting them (inadequate/inferior to their training qualifications' jobs, unattractive remuneration, lack of perspective with respect to a successful career, etc.).

- ***low number of successful experts with performances in the business environment available for teaching inter-disciplinary*** subjects that would draw the attention of the students towards market economy and its realities.

Box 3. Market share to the detriment of higher education quality

Universities have started a fierce struggle for "market share", based not on high standards and quality of services but on advancing a wide range of "advantages". Titu Maiorescu's theory of forms without substance, highly questioned by his contemporaries, is nowadays more valid than ever. If at that time, the theory made reference to the goal of building a school in each settlement, without available teaching staff, nowadays, instead of the artificial, socialist market, we have a "liberal" but chaotic market, focused on mercantile principles and hardly in agreement with the real demands of the labour market. "Universities or the Ministry of Education have never systematically monitored the market behaviour of their product and neither have they analysed the inside situation, among students, to find out the flaws of the process. They behaved like factories, industries that keep producing goods without considering the demand or the quality of their products".

Source: Liviu DRAGOMIRESCU, *Quantitative and qualitative analysis of higher education (Analiza cantitativă și calitativă a sistemului universitar)*, http://www.supradotati.ro/resurse/analiza_sistemului_universitar.pdf

- ***the lack of necessary balance between the educational supply and demand, under conditions of decreasing quality*** : the number of candidates is smaller than the supply of higher education, an access rate that exceeds

the transition rate, higher education supply than the total number of upper secondary education graduates (Annex 4). Comparatively, the main European countries have recorded a transition rate above the access rate. For instance, at the level of 2006, comparable cases with the Romanian situation can be found in Norway, Denmark and Russia, while the case of Sweden stands apart because the transition rate is approximately the same as the access rate (Annex 5). In the Romanian case, almost all candidates are admitted and, if there is a minimum effort and interest involved, almost all of them become graduates. The capability of the system to select, filter and professionally train the graduates for the labour market is often debated. The present educational system, determined by the wide access to higher education, is gradually changed into a “consumer good”⁵⁹. The data sources do not provide relevant information on the number of students who suspend their studies or on their average length (which is often longer than the standard duration of studies), in order to make judgments of value regarding this aspect.

- a considerable structural numerical and structural exists between education outcomes for vocational training and the demands on the national labour market, amplified in certain fields by the free movement of persons (the attractiveness of better paid jobs, not necessarily in the same training field), thus creating a significant deficit of qualified personnel in activities such as constructions, industry, services, including healthcare, while on the European labour market our citizens are employed preponderantly in low skilled or unskilled jobs. Another reason for this particular situation is the misperception regarding the usefulness of education – the indifference of certain students and even some teachers shown with respect to education, as they consider that success in life only depends on the “connections” one has, or on the ability to manage by all means, and not necessarily based on competencies, skills, talent, knowledge, etc. On the other hand, there is another widely accepted idea that success depends on having a degree, regardless of what kind or whether any knowledge has been acquired or not. There are multiple reasons from “examples” of the transition period to deficiencies of the educational system as a whole, built on obsolete professional structures, with little or no vocational guidance/counselling for students according to their personal skills and society’s requirements. Thus, there is a very large number of

⁵⁹ Pânzaru, I., *Romanian higher education and European integration*, conference at the Central University Library, 10 December 2008, http://www.unibuc.ro/ro/invatamantul_superior_romanesc_si_integrarea_europeana

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graduates in oversaturated fields and deficits deepen where personnel is needed. One example: in Bucharest, 60% of the schooling plan for the school year 2008-2009 was designed for the theoretical path and for jobs' segment on the labour market of 15-20%, while the technological path and vocational schools would incorporate 30% of the students for job segment of 80%. on the labour market Save for few exceptions, there is no practice of training labour force based on schooling contracts between educational entities and economic agents, or local councils, as the corresponding legislative framework is lacking attractiveness. Hence, the number of higher-education graduates (just as inadequately structured on competencies and professions) follows professional distribution structure far from the needs of the generally increasing labour market – as a whole, yet to different (Annex 6), volatile shares. Thus, the “contagion effect” occurs, according to which the candidate chooses a speciality depending on the wage scale for each field, on the advice given by their parents, “the general trend of their colleagues”, accessible specialities, etc., as they are lacking adequate information correlated with the social and economic development expectations.

- as for the *curriculum, it often fails being correlated with the demand on the labour market, is too overloaded and it does not consider developing for students the skills for continuing self-improvement, creativity, initiative, logical thinking, communication, team work, all included in the eight key competencies framework as established by the European Union.* Most Romanian schools still apply the old paradigm of learning through accumulation in order to graduate (teaching-dictating-repeating-forgetting), a method that has been replaced by modern society with a more flexible one that aims at developing the lifelong learning capacity of students, based on practical understanding (based on the principle *I hear and forget, I see and remember, I do and understand*). Modern concepts, such as digital curriculum, virtual libraries, are not very common in Romanian schools. The competencies expected by society and by the labour market from students are very cautiously introduced in the assessment process.

Box 4. Perception of teachers and students on Romanian higher education. Issues related to the training for the labour market

As result of the interviews carried out by the Soros Foundation Romania in 2007 it was shown that 70% of the teachers think that the Romanian higher education is just as efficient as the West-European one, while only 59% of the students agree with this statement. Approximately 40% of the teachers think that universities do not enjoy real autonomy and that the Ministry of Education still holds too much control over universities. Four out of ten teachers have at least one more job apart from their academic activities at the university. Almost half of them are employed in research or teach at other universities. One third is active on the market, either as employees or as employers. As for students, almost one quarter are employed and almost half (43%) would like to live in another country. Moreover, the great majority of students are from the urban area, while only 11% come from rural areas. The profile of the student who has more confidence in the opportunities provided by education is quite well traced: he comes from a well-educated, wealthy family, has more pocket money, has been studying in a renowned university, with over 10.000 students and is either a sophomore or a senior.

About 81% of the interviewed teachers think that students have an improper educational background from high-school, while half the teachers believe their students show little or no interest in studying.

Only 48% of the students and only 28% of the teaching staff believe that private schools are just as good as state schools.

The answer of all three categories of interviewed subjects to the question “In your opinion, what do you mostly need in order to succeed in life?” was that work is a decisive factor for success. The student who believes in work and education mainly comes from a well educated and wealthier family. On the other hand, those who believe in the same recipe for success are students who come from poor families but with a strong willingness to succeed in life.

Teachers who believe in the Romanian higher education are usually employed at renowned universities from the country.

Source: Mircea Comşa, Claudiu D. Tufiş, Bogdan Voicu. The Romanian higher education system. The opinions of teachers and students („Sistemul universitar românesc. Opiniile cadrelor didactice și ale studenților”), Soros Foundation Romania, 2007. (The study represents an analysis of the insight on the Romanian higher education environment, through the answers of over 1000 teachers and over 1000 students to questions about themselves and about the structure and functioning of the higher education system, university autonomy, academic corruption and the process of learning).

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The presented aspects reveal serious deficiencies within the system, particularly with respect to linking learning process outcomes with the needs of society for knowledge and competencies. The SWOT analysis for higher education allows us to highlight also some of the strengths of the system, as it still undergoes continuing reform.

The most important achievements/strengths take into account:

- the adoption of the Bologna system (3-2-3) and the compliance with its provisions as of the academic year 2005-2006; the development of Master's Degree and PhD programmes of international acknowledgement;
- increased enrolment rate in tertiary education; higher number of universities and extended territorial coverage;
- the existence of university centres acknowledged at national and European level (the University Babeş-Bolyai Cluj-Napoca, the University of Bucharest, the University Alexandru Ioan Cuza Iasi, the Western University of Timișoara etc.);
- the gradual transition from a learning system based on memorising to one focused on action and innovation; rendering flexibility to the curriculum, especially for Master's Degree and PhD programmes;
- the implementation of the computerised infrastructure in most higher education institutions;
- facilitating access to higher education and promoting social inclusion by means of places financed by the state budget, scholarships and social facilities (hostel accommodation, cafeteria, travel passes);
- the development of the lifelong learning/training system through postgraduate courses in accordance with the demands of the labour market;
- an increased number of international mobilities for students and teachers (TEMPUS, ERASMUS/ SOCRATES, Leonardo da Vinci, etc.);
- the increased number of teaching staff attending RDI activities; the higher dynamics of scientific research output and the growing number of books published with internationally recognised publishing houses;
- diversifying and strengthening international relations with foreign universities, especially from Europe.

The weaknesses/deficiencies of the system include:

- inadequate competitiveness and performance of both teaching staff and students;
- the existence of mostly theoretical educational programs, based on memorising and knowledge-transfer and not on competencies gain, debates, studies, etc.
- low attendance at courses and seminars, this trend becoming more marked in the final years;
- lacking correlation of handbooks to recent developments in the specific science fields. Inadequate quoting/take-over and reference to internationally recognised handbooks, the lack of practical application notebooks based on current realities and the possibilities in Romania; Lacking or insufficient case studies, workshops, management games, applications, etc;
- the excessive fragmentation of specialities in each faculty and the existence of a very high number of faculties in each university;
- the focus of teaching staff on the “elites” with the aim of earning recognition for the universities, to the detriment of training the majority of students for the labour market;
- weak links to the local business environment with respect to guidance and practice of students;
- the dichotomy between the curriculum and the demands on the labour market, thus leading to structural imbalances and loss/inefficient investment in education ;
- inadequate counselling of students in order to provide guidance towards fields where is demand for specialists and for avoiding situations when graduates are employed in different fields than the ones they have a degree in;
- inefficient use of the allocated funds as compared to obtained performances.

The most important *threats/risks* for continuing the reform make reference to:

- legislative instability; ambiguous legislation in the field;
- the lack of credible strategies of the state institutions with respect to higher education system;
- under-financing; the lack of sustainable alternative financing solutions on short- and medium term;
- lack of a database for assessing the performances of the system

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and for determining the impact of promoted measures;

- the difficult domestic and international economic environment, the economic crisis;
- low motivation of young people for efficient education;
- lack of vision and planning in developing an educational path development strategy;
- questionable quality of the degrees awarded in our higher education system;
- low attractiveness of the teaching profession – low wages, lack of support for research and lifelong learning/training, etc – hence failing to determine young valuable graduates to choose a didactic career;
- insufficient understanding and implementation of the requirements imposed by the Bologna process;
- demographic ageing; lack of correlation between the educational supply and the diminished school cohorts after 1990;
- limited research facilities and logistics ;
- rigid learning systems that do not stimulate creativity and innovation;
- deepening of social inequity and difficult access to higher education for youths from low income families; marked diminishment of students' from the rural area;

The opportunities of the higher education system under the conditions of the European Education Area development and of markets' globalisation took into account:

- agreements/contacts with European and North-American prestigious universities, thus leading to the evening out of the existing differences, i.e. the improvement and the adjustment of the Romanian educational system to the requirements of the market (the business environment);
- the higher education standardisation process at European level;
- access to international data bases;
- the increased demand of workforce with a university degree;
- opportunities to access non-reimbursable funds, both for the development of the infrastructure of universities and for the professional and personal development of the teaching staff;
- attracting foreign students;
- partnerships with foreign universities, with the extramural research network and with the business environment;

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- the development of the education co-participation system – designing and implementing policies for human resources development by large companies on the Romanian market;
- the emergence, both at national and regional level, of additional financing sources for investments in the educational system
- entry of foreign investors on the local market, that would create demand for well-paid experts' thus encouraging competition between students;
- diversifying the lifelong learning process by post-graduate university courses, Master's Degrees, PhD programs, teaching methodology trainings;
- increased awareness about the necessary transition from a teacher-centred, memorising learning process to a student-focused process, based on the teacher-student interaction and innovation.

Continuing the reform presupposes as *guidelines to be pursued*, at least the following:

- promoting and supporting performance human resources;
- continuing the standardization process and coordination with provisions at European level – the Bologna Process, the Lisbon Strategy;
- developing an advantageous system of studies' financing for students;
- modernising and promoting managerial education at universities' management level in order to ensure better quality of the educational process;
- develop Master's Degree and PhD programs in collaboration with the major European universities;
- develop projects for accessing European funds in view of developing the required infrastructure for a competitive university, as well as for the training of the human resources;
- promoting policies for attracting foreign students;
- promoting partnerships with the business environment and the civil society;
- promoting entrepreneurial culture and practices in universities;
- realising the hierarchy of major universities depending on performance ;
- training graduates in a manner compatible with the exigencies and demands of the economic environment;

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- matching tuition fees with the costs of quality study programmes;
- transition to education based on action, creativity and motivation;
- promoting curricula aimed to motivate students and adjusted to their aspirations;
- promoting the European dimension in higher education and generalising modern teaching systems;
- diploma recognition: adopting a system of comparable and well defined diplomas;
- promoting European cooperation in the quality assurance field;
- promoting lifelong learning.

2.3. Continuing training of young graduates – support for facilitating labour market insertion and efficient employment

In order to cover the (re)qualification/improvement needs during the vocational career, of developing basic, transversal competencies and “non-routine”⁶⁰ skills and competencies, for adjusting to the market demands, young graduates often resort to the continuing training system. Romanian companies require skilled labour force in order to meet the tough competition on the European market and for being able to continuously adjust to changes. CVT is made, usually, on request of the employer, or for individual career development. Necessary for the entire active life span, and for all categories/professions it is conditioned by: a) creating stimulation instruments for the employer to invest in personnel training; b) ensuring the facilities for adults to invest in own education and c) promoting partnership in adult educational supply.

Romania made some **progress in restructuring the continuing vocational training** system, registering an increase of participation to CVT courses from 0.9% in 1999 to 1.6 in 2004, to 1.3%⁶¹ in 2005 and 1.5 in 2007. Without a specific law this type of education is realised relatively chaotically and there is not inter-ministerial coordination in order to create a performance cooperation network. Market agents specialised to provide

60 See the Communication of the European Commission “New Skills for New Jobs; Anticipating and matching labour market and skills needs” COM(2008) 868 final, {SEC(2008) 3058}, with the time horizon up to 2020, (p.9).

61 See “Report on the progress towards the Lisbon Objectives in Education and Training, Indicators and Targets, 2008” - SEC(2008) 2293, European Commission; Brussels (EUROSTAT data).

CVT are authorised for each of the courses, yet the duration of the training demand may be rather varied. In this context, the development of an action plan for supporting the increase of adult participation to learning is imposed as a necessary priority given the fact that we are far also from the inferior target proposed by Romania by the SCVT for 2010 of 7% (the European target for 2010 is 12.5%). By SOPHRD it is proposed to increase this percentage to 15% until 2013, even though the previous performances make difficult reaching this target (the European Commission proposes an average target of adults' participation to education for 2020 of only 2.5 percentage points higher than the one for 2010, that is to 15%). The increased exigencies pertain to the adult continuing training system, under the conditions in which almost one quarter of the youths aged 18-24 years leave school without any basic competencies and necessary skills to take a job⁶². Important steps were made, for instance, for ensuring the second chance to education, or of extending guidance services, but there are still necessary diversification solutions of the training supply and of the initial education providers for adults, for a better adjustment to their particularities and learning needs and in order to be closer to market demand.

At the same time, companies are facing increasingly acute with the necessity of correlating the technological changes with the personnel training⁶³. Even under the restrictive conditions of the current economic crisis, CVT remains an important factor of economic turnaround of the economic agents. Nevertheless, Romania registers *low investments of the companies in continuing vocational training/improvement* (only 0.3% in

62 Ministry of Labour, Family and Equality of Chances, <http://www.cdep.ro/interpel/2007/r3085B.pdf>

63 The CVT need was triggered mainly by the absorption of the technological and non-technological progress of the companies. The situation of the companies' dynamics from the viewpoint of technological changes is perceived differently depending on regions, fields of activity and enterprises' size. Per whole country, 42% of the companies' representatives believe that at the level of their own companies important changes took place in the last 5 years at technological and non-technological level. The most significant technological and organisational changes were recorded for large companies (with over 50 employees). (Continuing Vocational Training in the process of technological development within the Romanian economy - REPORT –National Labour Force Employment and Vocational Training Observatory, Directorate for Programmes and Strategies of the Labour Force, Bucharest, April 2007 [http://209.85.129.132/search?q=cache:XV9qWjg5bH0J:www.mmuncii.ro/pub/imagemanager/images/file/Rapoarte-Studii/120407raport.pdf+ponderea salariatilor+la+formare+profesionala+continua&cd=1&hl=ro&ct=clnk&gl=ro](http://209.85.129.132/search?q=cache:XV9qWjg5bH0J:www.mmuncii.ro/pub/imagemanager/images/file/Rapoarte-Studii/120407raport.pdf+ponderea+salariatilor+la+formare+profesionala+continua&cd=1&hl=ro&ct=clnk&gl=ro)

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200064), as continuing learning of the labour force is regarded by companies more as an expenditure and less as sustainable investment with positive effects on medium- and long-term.

Even if by the collective labour contract at national level is provided for the realisation of a Vocational Training Plan for Personnel and its implementation, practically, only a low number of companies (40.3% in 2005) provide CVT to their employees. The concern of enterprises to provide CVT to their employees is in reverse proportion to their size class. If 71% from the companies with 1000 employees and over provided CVT, from the small ones with 10-19 employees CVT was provided only by 10.7%. Only 68.8% provided CVT through courses (external and internal) and 81.7% made use of other forms, respectively practical training, instruction or experience on the job, personnel rotation on different jobs, experience exchanges, far-training, etc.⁶⁵. The participation rate to CVT was of 26.4% per total public entities (22% for persons under the age of 25), and of 32.3% for those in private entities (respectively, 35.6%)⁶⁶. Even if the average period of the continuing vocational training increased in 2005 by 1.3 times as compared with 1999, the average period per participant was only half by then (44.1 hours against 72.7 hours) and 69.9% from the time allotted in this manner was developed within the working time.

Next to the supply of the companies, *the CVT services' system* is difficult to measure from the quantitative and qualitative viewpoint. The services' providers' are various from formal educational institutions to specialised economic agents and institutions of the civil society pertaining both to the public and the private environment. Educational institutions are focused on initial education, and the supply has a low level of diversification and of adjustment to the necessities of adults and employers. At post-university level, the universities are focused rather on the supply of master and doctor courses and less on modular, flexible and punctual supply for improvement during the career. The institutions specialised in CVT services, as specific market operators are focused mainly on the provision of learning for vocational training/improvement, and *on the demand on short-term*, on knowledge updating, of gaining general and specific competencies and skills generated by the changes of the job contents. Because CVT must

64 Statistical Yearbook of Romania 2008, NIS.

65 Characteristics of the vocational training in Romanian enterprises, 2005, NIS, Bucharest, 2007.

66 Characteristics of the vocational training in Romanian enterprises, 2005, NIS, Bucharest, 2007.

also provide the opportunity of swift adjustment to the continuously changing requirements of the labour market, *the diversification and increase of the vocational training supply quality* should be a permanent concern.

On insertion on the labour market, the graduates of initial training have **adjustment difficulties** to the working conditions. By and large, the skills obtained allow the graduates to exercise several jobs, but in order to be able to adjust to the requirements of a certain job/career they need to be **included in transition programmes from school to work**. The existing programmes do not support sufficiently the effective insertion of the graduates on the labour market, and “learning by doing” and career guidance does not answer to a satisfactory extent to the labour demand. In its turn, the CVT supply even though closer to actual demand is not enough developed and adjusted.

From the viewpoint of *transparency and accessibility of information* with respect to CVT supply and providers, we could state that important steps were made, such data bases being managed by CNFPA and ANOFM. Even CVT providers have their own data bases. Yet, **currently there isn't an integrated system, a network for managing a data basis** (statistical data and information), or systematic and integrating follow-up mechanisms of the training supply and demand at national, regional, local level, on trades, careers, professions and categories of knowledge and competencies, etc., so that at national level the real dimensions of the demand and supply of CVT services is not known, and neither their quality and efficiency, i.e. their impact. The statistical surveys about CVT of NIS, ANOFM (AJOFM) regarding the vocational training of unemployed, the statistics of authorising courses of the CNFPA as well as the documentation of each trainer do not provide a whole and coherent image. In addition, the institutions pertaining to some other structures (people's universities, NGOs, etc.) provide only sporadic and partial information, and the knowledge and competencies obtained in this way are not recognized save for the extent in which the beneficiaries request their certification in one of the over 40 evaluation centres of vocational competencies currently existing.

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Box 5. Adult continuing vocational training courses

For the courses financed by the unemployment fund, as active employment measure, have opted only 8.77% from total unemployed registered in 2006 by ANOFM, and this when training is free of charge. In 2007, 46999 persons participated from which 89.9% were unemployed⁶⁷. The financial effort planned for continuing training from the unemployment fund of only 2.17% from total was realised only in a share of 78.34%.

With respect to the dynamics of the adult vocational training dynamics, it should be mentioned that on one hand an increase was recorded for the demand of training/learning by the market, and on the other hand the number of training providers increased. In 2004-2007, 8431 adult training providers have granted 549099 qualification certificates and 357935 graduation certificates. In 2008, the number of providers increased to 3134 (by 17% more than in the preceding year), and these granted 187755 qualification certificates and 169352 graduation certificates. At the same time, in the period 2004-2007, the 42 existing evaluation centres for obtained competences within the non-formal and informal system issued a number of 6050 certificates.

Source: CNFPA, <http://www.cnfpa.ro>

The analysis of the current system of vocational training for the graduates entered on the labour market or in view of their insertion is supported within the existing regulation framework⁶⁸ and by the increased interest of adults for using vocational training programmes, especially among young pre-skilled persons who prove more openness towards vocational reorientation.

Yet the system is lacking with respect to: flexibility and its capacity to answer to the continuing changing demand of the market, to developing/adjusting the national qualifications' framework, and of the competencies' and skills' certification framework by the training providers within the continuing vocational training system; the weak adaptation of the continuing training **supply** to the requirements on employment and on the job; skills and competencies are not adequate enough to the needs of the labour market; the limited answer capacity of the continuing training system

⁶⁷ http://www.anofm.ro/files/Raport_activitate_ANOFM2007%20.pdf

⁶⁸ The methodology for authorising vocational training suppliers of adults; the methodology of certifying vocational training of adults; the qualifications' nomenclature for which programmes finalised with qualification certificates may be organised; the evaluation and certification procedure for vocational competencies obtained by other ways than the formal ones, which regulates the evaluation and certification of competencies gained in a non-formal and informal manner.

by authorised courses to the requirements of the labour market determined by the emergence of new careers due to the much too long period of developing career standards and far too complicated procedures.

The development of the national qualifications' framework, as well as of the certification framework for competencies and skills by the training providers within the continuing vocational training system, including here the certification of competencies in traditional trades would allow for the increase of youths participation to continuing training (for insertion on labour market for the skilled ones, and for continuing/certifying studies for those who abandoned schooling). The necessity/acceptance of the enterprises' need of change implies also adjustment, knowledge, competencies and skills updating, respectively correlation between the training needs of the personnel and technological changes, hence, adjustment also adjustment of the young graduates – **the current system of initial education does not anticipate the training needs of the labour market but follows them and often the inertia of change/lack of flexibility/adjustment triggers the CVT demand for (newly) entered youths on the labour market.**

The lack of an integrating approach with respect to adult education (it is not provided for integrally into the distinct responsibilities' area of any ministry) and the absence of coherence and complementariness between the policies in the field of education, initial vocational training and continuing vocational training delay the answer of the system to the demands on the labour market. The youths exit the education system with a theoretical training and are faced with low mobility on the internal labour market with respect to completing the competencies deficit, particularly in the sectors with rapid development and in the new activity sectors/jobs. Therefore, more often than not the adjustment system of the youth is sustained mainly by training on the job and includes only minimal competencies for being able to act efficiently on the job. *Under the conditions of the economic-financial crisis, the CVT investment is the lever for increasing flexibility and adaptability to the new challenges, and the partnership (central public and local public authority, individuals, community, private environment) in promoting ACVT represents the support factor of the new graduates in view of labour market insertion and finding a job adequate to own career aspirations*, even if this need is acknowledged at the level of the entity, the severe financial restrictions and drastic diminishment of the demand for goods and services make difficult, sometimes even impossible on short-term the investment in human resources by education. The increasing precariousness of employment, the doubling of unemployment in less than

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one year and the continued perspective of further increase up to 8.5% (or more likely up to 10%) trigger rather adjustment behaviours (including here temporary accepting of wages' diminishment and unpaid furlough) than resources investment for vocational training/improvement the results of which may be changed in productivity, wage incomes and/or profits on medium-term.

Chapter 3. THE NATIONAL LEGAL FRAMEWORK AND THE TRAINING/DEVELOPMENT OF PROFESSIONAL SKILLS. IMPACT OF DIPLOMA AND CERTIFICATES RECOGNITION IN THE NATIONAL SYSTEM AND OPTIMISATION OF THE LEGISLATION

The policies in the field of education which are proposed by the European Union for the future years meet the demand of a continuously changing labour market. The gradual involvement of new policies restructures the existing procedures in the educational system, while education is correlated with the employment and competitiveness degree (Papadakis and Tsakanika, 2006). Lifelong learning policies promoted by the European Commission (Volkers, 2006) highlight that the national and European strategy in the field should be systematic, coordinated at the level of education and continuing vocational training, covering the entire educational system (formal and non-formal) and all levels, suggesting flexible ways of learning, including effective transition points between these levels, emphasising the importance of re-qualification, creativity and innovation and requiring a redefinition and development of some qualifications, by highlighting the necessary financial resources and the way in which these may be efficiently allotted by involving all interested stakeholders, through partnerships, at local and regional level, including dissemination and implementation measures. In the context of the two important strategies and processes, that are interdependent and correlated (the Bologna Process and the Lisbon Strategy), education and thereafter educational policies are brought up at the level of political actions as bifocal point of strategy's start up. The aim of the aforementioned strategy is to ensure sustainable development (OECD, 2003) and of promoting both employment and social cohesion in the interior of post-industrial societies. Indeed, any attempt to analyse education, as a whole, as well as its defining factors (that is learning and teaching) in the context of the Lisbon Strategy cannot omit the effects of the new forms of internationalisation and the changes in economy and on the labour market (Lavdas, Papadakis and Gidarakou, 2006). All mentioned changes reflect the rationality of the dominant policies in the context of the policies in the field and the macroeconomic vision of the educational policies as active employment policies (Hirst and Thompson, 1996; Hviden, 2001).

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Europeanization, over-nationalisation of public policies, the predominance of the new economic paradigm of current development and the challenges of multiculturalism on the political systems and national cultures represent major tests for the current educational system and impose a redefinition of the role of learning, skills and aptitudes within the educational process, the change of the learning paradigm (CCU, 2003).

The EU strategies and recommendations in the field provide the building-up framework of the support network at national level for improving the education system, for bringing the outcomes of learning closer to the needs of the labour market. In Romania, a realistic strategy about the correlation of the education system to the labour market cannot be conceived without considering the bi-univocal relation between the economic-social development level, implicitly of the labour market, and the educational system. Moreover, it is necessary to take into account the information deducted from national forecasts, elaborated either globally or on fields regarding the national and international environment, the educational, economic and scientific trends at world level and the evaluations on fields, or the SWOT analyses. For Romania, a major problem, next to the legislative stability and institutional performance is represented by the realism, efficiency and coherence of forecasts regarding the development of society and national economy.

3.1. The professional skills development policy among graduates and young peoples at European level

3.1.1. The legal power of the Community acquis in the field of professional training

The European political resolve (2000, Lisbon European Council) considered that increasing the transparency of qualifications has to be one of the main components necessary required for adjusting educational and of professional training systems within the European Community to the requirements of the society of knowledge. Subsequently, the importance of improving transparency and recognition methods in the field of education and professional training was underlined (2002, Barcelona European Council). In this context, the credit transfer system has gained a great importance in stimulating the development of competences. “The purpose (...) **is to create** a European Credit System for Vocational Education and Training (‘ECVET’) intended to facilitate the transfer, recognition and accumulation of assessed learning outcomes of individuals who are aiming to achieve a qualification. This will improve the general understanding of

citizens' learning outcomes and their transparency, transnational mobility and portability across and, where appropriate, within Member States in a borderless lifelong learning area, and will also improve the mobility and portability of qualifications at national level between various sectors of the economy and within the labour market; furthermore, it will contribute to the development and expansion of European cooperation in education and training.” (2009, Recommendation 2009/C 155/02). Considering the legal power of the Directive, as well as the competences of the institutions' in this field, using ECVET should not affect the access to labour market where professional qualifications have been recognized in accordance with Directive 2005/36/EC. “*Moreover, ECVET does not imply any new entitlement for citizens to obtain the automatic recognition of either learning outcomes or points.*” The main measure having the nature of a recommendation for member states is to “create the necessary conditions and adopt measures, as appropriate, so that as from 2012 – in accordance with national legislation and practice, and on the basis of trials and testing – it is possible for ECVET to be gradually applied to VET qualifications at all levels of the EQF, and used for the purpose of the transfer, recognition and accumulation of individuals' learning outcomes achieved in formal and, where appropriate, non-formal and informal contexts”. Thus, the European Parliament and the Council propose the realisation of experiments based on values, attached to the recommendation, without imposing binding measures or sanctions on the Member States for not taking adequate measures.

The establishment of the **European Quality Assurance Reference Framework for Vocational Education and Training** (2009, Recommendation 2009/C 155/01) –as a reference instrument for sustaining Member States in promoting and monitoring the continuous improvements of EQF systems based on common European references on which the Common Quality Assurance Reference Framework is based, represents an element of the organisational effort of a domain without competences, even if substantiated by the political guidelines of the Lisbon Council. This measure that should have created the necessary conditions for the development of the society of knowledge appears in 2009, has as implementation deadline (having the nature of a recommendation) the middle of 2011. The paradox of this measure is not its relative tardiness, the EC managing to achieve but a neutral success in the domain and by no means attaining the creation of a knowledge-based economy. Moreover, in the 2009 Recommendations', the European institutions have acknowledged the delay, by referring to a new offstage of „*transition to the economy based*

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on knowledge”. This stage of transition is in fact a stage of experiments proposed by the European institutions to the Member States.

One may analyse the Community acquis only by having in mind the competences of the European Community in this domain (Articles 149 and 150 EC), the educational domain being constructed, from the viewpoint of the Community legislation, by the only option provided by the Treaty, namely the open method of coordination.⁶⁹ Legislative harmonization by this method can be realized with certain deficiencies, the main disadvantage being the use of certain Community acts with a lower legal force as of the Directives and Regulations.⁷⁰ Moreover, there can be different interpretations from one administrative body to another in a Member State, without the possibility to supervise the adopted measures.

3.1.2. Relevant case-law

The legislative measures comprised in the field of professional training have the nature of soft law, being implemented by the open method of coordination; the European Community does not have express competences. Giving impetus to the process of legislative harmonization had as basis the political resolve and, to an equal extent the judgments of the Court of Justice. None of these „methods” should be harmonized within national legislation, but either the measures are imposed by political willpower of the State, or the decisions of the Court of Justice are mandatory. In this framework the case-law gains a great importance, some aspects bearing importance for the present study.

a) Although the structure of education and the policy on education are not among the competences of the European institutions as such, **the access and participation** to educational and to apprenticeship courses, especially when these courses regard professional training, are related to community law (par. 19)

⁶⁹ Paul CRAIG, Grainne de BURCA, *Dreptul Uniunii Europene. Comentarii, jurisprudență și doctrină*, Ediția a IV-a, Ed. Hamangiu, 2009, p. 180 și urm.

⁷⁰ According to Article 249 EC: „Recommendations and opinions have no binding effect”. On the legal force of Recommendations, the European Court of Justice (322/88, judgment of 13.12.1989, *Grimaldi/Fonds des maladies professionnelles*, [1989] ECR, p. 4407) decided that „national courts are bound to take those recommendations into consideration in order to decide disputes submitted to them, in particular where they are capable of casting light on the interpretation of other provisions of national or Community law”.

Box 6. Gravier Case

In this case the court considered that „it must therefore first be considered whether or not the establishment of a fee such as that which is the subject of the order making the reference constitutes ' discrimination on grounds of nationality ' within the meaning of article 7 of the Treaty” (para. 11) the Belgian state and the Communauté Française argued before the Court that the reason why foreign students in Belgium are required to contribute to the financing of education is the imbalance which has existed since 1976 between the number of foreign students studying in Belgium and the number of Belgian students living abroad. Since that imbalance had serious consequences for the national education budget the Belgian government was compelled to ask students who are nationals of other member states and who normally do not pay taxes in Belgium to make a proportional contribution to the cost of education. Far from being discriminatory, such a contribution puts foreign students on the same footing as Belgian nationals. (para. 12)

The Court declared that “such unequal treatment based on nationality must be regarded as discrimination prohibited by article 7 of the Treaty if it falls within the scope of the Treaty”. (para. 15)

The Court decided this case by starting from the point that the referred questions do not regard the structure of education, nor its financing, but only the fact to establish a financial threshold regarding access to education exclusively for foreign students. Secondly, the issue regards a well established form of education, considered “professional training” in the first question and “the study of cartoons” in the second question.

Source: ECJ, 293/83, Judgment of 13.02.1985, Gravier, ECR, p. 593

„In what regards, especially, professional training, the Council establishes the **general principles for realizing a common policy on professional training**, that will contribute to the development of national economies as well as of the common market (Article 128 of the Treaty). Council Decision 63/266/EEC of 2 April 1963 laying down general principles for implementing a common vocational training policy (OJ No 63, 20. 4. 1963, p. 1338/63) contains the first principle according to which “The general principles must enable every person to receive adequate training, with due regard for freedom of choice of occupation, place of training and place of work.” (para. 21)

b) The **common policy** of professional training mentioned in Article 128 of the Treaty **is realized progressively**. This represents an indispensable element for the Communities’ activities; the objectives of which include

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among others, free movement of persons, the mobility of work force and the improvements of the standard of living of workers. (par. 23)

The special attention of European institutions on issues regarding access to professional training and on the improvement of this access within the Community, also results from the **General guidelines for drawing up a Community action programme on vocational training** established by the Council in 1971 (OJ C 081, 12/08/1971 P. 0005 - 0011), from the Resolution of the Council and of the education ministries reunited within the Council of 13 December 1976 on measures that should be taken for the improvement of the formation of young people for professional activity and to facilitate their transition from education to active life (OJ C 308, 30.12.1976, p. 1–3), as well as from Council resolution of 11 July 1983 concerning vocational training policies in the European Community in the 1980s (OJ C 193, p. 2).”

Especially, the access to professional training can facilitate the free movement of persons within the Community, allowing them to obtain qualification in the Member State in which they intend to activate and offering them the chance to perfect training and to develop special skills in the Member State in which professional education includes the appropriate specialization. (para. 24)

It appears from the above mentioned precedents that the conditions on the access to professional training are within the scope of application of the Treaty. (para. 25)

c) Organizing both the educational system, as well as professional training pertains to the responsibilities of Member States (Articles 149 EC and 150 EC). This responsibility implies, especially, the protection or improvement of the educational system, which should consequently constitute legitimate purposes in the light of the mentioned provisions of the treaty (para. 39).

Box 7. Lyyski Case

The ECJ interpreted article 12 EC and of 39 EC. As relevant community law provisions there were included the provisions of article 149 EC and 150 EC.

In this case, CJEC had in view the principle of proportionality of the adopted measure, stating that “*Community law does not preclude national legislation which organizes, on a provisional basis, training courses intended in the short term to meet the need for qualified teachers in a State from requiring that candidates for that training be employed in a school in that State, provided, however, that the manner in which that legislation is applied does not lead to the*

exclusion, as a matter of principle, of all applications made by teachers who are not employed in such a school without prior individual assessment of the merits of those applications in the light, inter alia, of the aptitude of the person concerned, and the possibility of monitoring the practical part of the training received or possibly of exempting that person from it.”

Through the questions referred by the national court to the European Court of Justice, questions that are to be considered together, “the national court asks essentially whether Community law precludes national legislation organising, on a provisional basis, training courses intended in the short term to meet the need for qualified teachers in a Member State from being applied in such a way as to reserve the benefit of that training to candidates employed in a school in that Member State and whether, in that assessment, it is important whether or not such training is on a permanent basis and whether or not the candidates are nationals of that Member State.” (para. 25)

Source: ECJ, C-40/05, Judgment of 11.01.2007, Lyyski, [2007] ECR, p.I-99.

3.2. National legislative milestones in European context

Romania transposed both legally and institutionally the relevant community law in the field of education and professional training.

The issue of recognition of professional qualifications is counted among the present concerns of reforming/improving the educational system in Romania.

At EU level, starting from the 1970s, the European institutions have aimed that future works on mutual recognition should be based on flexible and qualitative criteria, and that the Directives “should propose as less possible detailed requirements on professional training”⁷¹, due to the reasons that can easily be detected in the harmonization proceedings in this problematic field.

Council Directive 89/48/EEC of 21 December 1988 on a general system for the recognition of higher-education diplomas awarded on completion of professional education and training of at least three years' duration⁷² has brought a considerable progress (that some States have considered to be imposed by the Commission) for individuals who wished to carry on a profession in another member state than that in which he had studied. In the preamble of this Directive is highlighted that “the level and duration of the education and training governing access to those professions

⁷¹ Council Resolution, OJ C 98, 1974, p. 1.

⁷² OJ L 19, 24/01/1989 P. 0016 – 0023, The Directive was amended by Directive 2001/19/EC of the European Parliament and of the Council of 14 May 2001

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have been regulated in a similar fashion in all the Member States or have been the subject of the minimal harmonization needed to establish sectoral systems for the mutual recognition of diplomas". This process is currently unfolding, including the harmonization process, by means of soft law, the so-called "Lisbon process", having both supporters and challengers.

Further, it is emphasised that in the case of "those professions for the pursuit of which the Community has not laid down the necessary minimum level of qualification, Member States reserve the option of fixing such a level with a view to guaranteeing the quality of services provided in their territory; whereas, however, they may not, without infringing their obligations laid down in Article 5 of the Treaty [*currently Article 10 EC*], require a national of a Member State to obtain those qualifications which in general they determine only by reference to diplomas issued under their own national education systems, where the person concerned has already acquired all or part of those qualifications in another Member State; whereas, as a result, any host Member State in which a profession is regulated is required to take account of qualifications acquired in another Member State and to determine whether those qualifications correspond to the qualifications which the Member State concerned requires" This paragraph contains the key to all disagreements that have led to preliminary questions referred to the Court.

*The provisions of the Directive cannot be invoked in order to obtain access to a profession legally regulated in a host Member State, by the holder of a title awarded by an authority of another Member State which does not attest any training within the education system of that Member State and is not based on an examination or professional experience gained within the Member State in question*⁷³. The Directive does not apply to professions that are still subjected to specific sectorial regulations, such as the recognition of the diplomas and of the activity of lawyers⁷⁴. Also, several professions have not been yet regulated, the activity of the legal interpretation of the ECJ being very interesting⁷⁵.

⁷³ ECJ, Judgment of 29.01.2009, *Consiglio Nazionale degli Ingegneri*, not yet reported.

⁷⁴ Directive 77/249; Directive 98/5/EC of the European Parliament and of the Council of 16 February 1998 to facilitate practice of the profession of lawyer on a permanent basis in a Member State other than that in which the qualification was obtained, OJ L 077, 14/03/1998 P. 0036 - 0043

⁷⁵ For geologist: C-164/94, *Arantis*; C-149/05 *Price*; for a general definition of regulated professions: C-234/97, *de Bodadilla*, par. 14-21. See *Craig, De burca*, op. cit., p. 1040.

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The main benefit gained by European citizens, comprised in Article 3 of Directive 89/48/EEC⁷⁶ refers to the case in which in a host member state the access to a legally regulated profession or its exercise is conditioned by the holding of a diploma, in which case the competent authority cannot refuse the national of a member state, due to inadequate qualification, the access to the profession in question or its exercise in the same conditions as for the nationals of the host member state:

(a) in the case in which the applicant holds a diploma required in another member state for the exercise of that profession on its territory, the diploma having been awarded in a member state: or

(b) in the case in which the applicant has fully exercised this profession in a member state for two years, during the last ten years in a member state which does not regulate this profession in the sense of article 1 letter (c) and article 1 letter (d) first paragraph, holding one or more titles of official qualification:

- which have been awarded by a competent authority of a member state designated in conformity with the legislative or administrative documents of the member state in question:

- which demonstrate that the holder has successfully completed a cycle of higher education courses, with the minimum duration of three years or with the equivalent duration without frequency, in a university or a higher education institution or any other institution having the same level of training within the member state and, if necessary, that he has successfully completed his professional training required along the higher education studies:

- which have prepared the holder for the exercise of his profession⁷⁷.

⁷⁶ See: C-285/01, Judgment of the Court of 9 September 2003, Isabel Burbaud v. Ministère de l'Emploi et de la Solidarité, C-102/02, Judgment of the Court (fifth Chamber) of 29 April 2004, Ingeborg Beuttenmüller v. Land Baden-Württemberg; C-141/04, Michail Peros v. Techniko Epimelitirio Ellados, Judgment of the Court (fourth Chamber) of 14 July 2005; C-149/05, Harold Price v. Conseil des ventes volontaires de meubles aux enchères publiques, Judgment of the Court (first Chamber) of 7 September 2006; C-197/06, Confederatie van Immobiliën-Beroepen van België VZW and Beroepsinstituut van Vastgoedmakelaars v. Willem Van Leuken, Judgment of the Court (second Chamber) of 17 April 2008; Cases C-180/08 și C-186/08, Maria Kastrinaki tou Emmanouil v. Panepistimiako Geniko Nosokomeio Thessalonikis AHEPA, Decision of the Court (sixth Chamber) of 13 November 2008.

⁷⁷ This chapter has been subjected to several infringement proceedings against several Member States: Greece (C-274/05) and Spain (C-286/06, Commission/Spain, Judgment of the Court (Second Chamber) of 23 October 2008).

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The member states have the right to provide certain conditions in order for the recognition of diplomas to have a full effect⁷⁸.

The Commission considers that **Directive 2005/36/EC** of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications represents a step forward⁷⁹. (“The system for the recognition of professional qualifications is a document posted on the web site of the European Union⁸⁰, and which is a synthesis of the directive⁸¹).

The Directive provides five levels of professional qualifications:

a) an attestation of competence issued by a competent authority in the home Member State, attesting the fact that the holder has gained the general necessary knowledge corresponding to first degree or secondary education or that he has benefited of training that is not attested by a certificate or diploma, or that he has passed an examination, without previous training, or that he has a three years professional experience;

b) a certificate attesting to a successful completion of a secondary course, having a general, a technical or a professional character, supplemented by a course of study or professional training;

c) a diploma attesting on year education courses after high school or professional training, similar from the point of view of responsibilities and functions;

d) a diploma attesting higher education training or university level training with a minimum duration of three years, and nor more than four years;

⁷⁸ C-330/03, Colegio de Ingenieros de Caminos, Canales y Puertos v. Administración del Estado, Judgment of the Court (first Chamber) of 19 January 2006.

⁷⁹ Directive 2005/36/CE was amended by: Council Directive 2006/100/CE of 20 November 2006 L 363 141 20.12.2006; Commission Regulation (CE) no. 1430/2007 of 5 December 2007 L 320 3 6.12.2007; Commission Regulation (CE) no. 755/2008 of 31 July 2008 L 205 10 1.8.2008; European Parliament and Council Regulation (CE) no. 1137/2008 of 22 October 2008, L 311 1 21.11.2008; Commission Regulation (CE) no. 279/2009 of 6 April 2009, L 93 11 7.4.2009

⁸⁰ http://europa.eu/legislation_summaries/education_training_youth/vocational_training/qualifications_recognition/c11065_en.htm

⁸¹ The Commission has taken the measure of filing complaints against certain states for not fulfilling of obligations under Community Law, and for the lack of implementation of the directive. The applications are currently unfolding: C-465/08, Commission/Greece, C-469/08, Commission/The Kingdom of Belgium; C-556/08, Commission/United Kingdom of Great Britain and Northern Ireland; C-567/08, Commission/Grand Duchy of Luxembourg.

e) a diploma attesting successful completion of higher education or the equivalent of university level training of at least four years.

In order to recognize the qualifications, the host member state can impose to the applicant the fulfillment of compensatory measures (testing his abilities or accepting an internship of maximum three years) in one of the following cases:

- When the training period is at least one year shorter than the one necessary in the host member state
- When the training he has undergone covers different disciplines than the ones included in the qualification title awarded by the host member state
- When the regulated profession of the host member state includes one or more regulated professional activities, which neither do nor exist in the correspondent profession of the member state of origin of the applicant and this difference is characterized by a specific training which includes greatly different subjects than the ones comprised in the applicant's training.

The Directive has as purpose the recognition by the Member State of the professional qualifications obtained within the Member States. Nevertheless, the Directive does not have as object the recognition by the Member States of the recognition decisions taken on the basis of the directive by other Member States. Consequently, an individual holding professional qualifications recognized by the directive cannot invoke this recognition in order to obtain, in his member state of origin, different rights than those conferred to him by the professional qualifications obtained in the member state in question, except the case in which he would prove that he has obtained extra professional qualifications in the host member state.

Currently, the legislative coherence is being assured by Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 *on the recognition of professional qualifications*⁸². Also, the legal doctrine⁸³ has underlined that although the approach of the mutual recognition represents a clear advantage, there can still be highlighted certain disadvantages, such as the fact that **there are no guarantees that**

⁸² OJ L 255, 30.9.2005, p. 22-142, special edition in the Romanian language: chapter 05 volume 08 p. 3 – 123. This very important binding Community act was accomplished in two stages: first was that of the sector development regarding the recognition of professional qualifications and the second regarding the development of the procedures having a general character.

⁸³ Craig, de Burca, EU Law, p. 1039.

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the qualifications belonging to individuals holding different qualifications will be automatically recognized.

The implementation acts adopted in Romania:

Law no. 200/2004 regarding the recognition of diplomas and professional qualifications for professions that are regulated in Romania⁸⁴;

Government Decision no. 1921/2004 amending appendix no. 2, 3 and 5 of Law no. 200/2004 regarding the recognition of diplomas and professional qualifications for professions that are regulated in Romania⁸⁵.

3.3. Continuing legislative reform. New orientations. Narrower approach to the demand on labour market

After the TVET reform for the secondary education level, in which emphasis was laid on improving the technological path, through the Bologna system, as of 2005/05 an important step was achieved in the reform of higher education. Romania, by signing the Declaration of Bologna (19th June 1999) committed (together with other 28 European states) to include the objectives agreed on at EU level in the priorities of the Romanian higher education and to contribute in this way to the creation of the European Higher Education Area up to 2010 in connection with the European Research Area as basis for strengthening a knowledge-based Europe. The Bologna Process had as main purpose to harmonise the higher education system of the European area. The Bologna Process will lead in time to the creation of a modern area of European education within which the students and graduates of higher education shall benefit from a system focused on mobility, quality, easy diploma recognition and their involvement into the key aspects of higher education. In fact, it represented another stage in the **better definition of the role of higher education within society.**

Box 8. Main Objectives of the Bologna Process

The Declaration of Bologna (1999) defined 6 common objectives: 1. Diploma recognition: adopting a comparable and well-defined diploma system; 2. Adoption of a system based on two cycles (bachelor/master); 3. Implementing the credits' system (ECTS); 4. Promoting mobility; 5. Promoting European cooperation in the field of quality assurance; 6. Promoting the European

⁸⁴ Amended by: Government Decision no. 1921/2004; Government Emergency Ordinance no. 86/2006; Government Emergency Ordinance no. 109/2007; Law no. 117/2008; Law no. 265/2008; Law no. 94/2009.

⁸⁵ Published in the Official Journal no. 1174 of 13 December 2004.

dimension of higher-education;

*In the Communiqué of the Ministers from Prague, 2001, three objectives are added: 7. **Lifelong learning**; 8. The social dimension; 9. Promoting the attractive character of the European Area of Higher-Education;*

The number of objectives is completed up to ten until 2003 by the Communiqué of the Ministers from Berlin: 10. The European Area of Higher-Education and the European Research Area – two pillars of the knowledge-based society;

*The intermediary priorities are established by the Communiqué of the Ministers from Bergen, 2005: Introduction of the system analysis models for the quality assurance agencies, as proposed in the ENQUA Report; **Implementation of the national qualifications’ frameworks**; Issuance and recognition of common diplomas, including at doctor’s level; Creating opportunities for flexible educational paths within higher education, including by recognition procedures for previous learning.*

*“The Communiqué of the Ministers from London”, 2007, established new intermediary priorities: Mobilities; Social dimension; Collection of statistical data; **employability**; The European Area of Higher Education in global context.*

At the “European Ministers Conference” from 28-29 April 2009, the responsible representatives for higher education and research within the Bologna Process which took place in Leuven, Belgium, examined the following topics: Achievements in implementing the objectives of the Bologna Process from London (2007); Higher-education priorities for the following decade, emphasising mainly: the social dimension of higher-education; lifelong learning, development of academic mobility of students and teaching staff, development of the Qualifications’ Framework, diversification of the financing sources of higher-education, the synergy between higher-education and research.

The following meeting within the Bologna Process, shall take place in 2010 at Vienna and Budapest. Also, it was decided on organising the Ordinary Conference on the Bologna Process in 2012 – at Bucharest, Romania.

Source: <http://www.edu.ro/index.php/articles/text/8412>

The Bologna Process at national level implied for the signatory states in-depth reforms of higher-education, marked by legislative changes and the reconsideration of the basic principles of the educational process for a knowledge-based society. The progresses achieved in fulfilling the Bologna objectives are monitored through national reports and assessed within the “stocktaking” process, and the outcomes of this inventory process are rendered concrete in presenting a country score in accordance with realised progress and the reforms’ stage. Up to now were realised two of these evaluation exercises - in 2005 and 2007. Romania presented until now

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three national reports (in 2003 at the Ministers' Conference from Berlin, in 2005 at the Ministers' Conference from Bergen and in 2007 at the Ministers' Conference from London) and participated in two working groups in the period of Great Britain's chairmanship at BFUG⁸⁶ 2005-2007 (Portability of scholarships and study credits, respectively Inventory of Progresses).

The main reason substantiating the document signed at Bologna in 1999 was to simplify and unify the education system in all EU member countries⁸⁷. The change of the tertiary and post-university education structure based on the system 3+2+3 and the implementation of the quality criteria at bachelor and masters' level are only two of the requirements established within the respective document (implies re-accrediting of all universities up to the year 2010), for mutual diploma recognition in the European area and free movement of labour force. Of essence is the fact that this process presupposed a deeper reform at masters' level, meaning the possibility of a wider range of specialty provided to bachelor graduates, irrespective of the graduated profile.

This fact was aimed to support the vocational insertion of the graduates and to provide for the opportunity of finding the employment niche. **The Treaty of Lisbon** stipulates that EU may promote actions of **supporting, coordinating and also complementary ones in the field of education** (granting financing, for instance), and the responsibility of building-up a performance educational system and the policies in the field represent the responsibility of each state.

In the year 2009, a framework-law of permanent education was proposed which, in accordance to the promoter (the Government) brought coherence and promoted quality, having an integrating vision on the national lifelong learning system. The draft was submitted to the Parliament and a swift implementation thereof was attempted, by assuming responsibility. Yet, declared as unconstitutional, it is currently undergoing

⁸⁶ The main fora of decision within the Bologna Process is the Bologna Follow-Up Group (BFUG), where the participating countries are represented at the level of the state secretary, general manager or expert.

⁸⁷ There are some European university which did not shift to this Bologna system (it is the case of the universities from Germany and Spain) or in the case of other states which shifted to this system opinions are divided about the efficiency of the higher-education system. See the case of Austria, country which shifted to the Bologna system as of the university year 2008-2009, and the protests of the students from the Vienna university, supported also by a part of the professors, which considered also the "standardisation" of the European system.

the revision/improvement procedure at the responsible ministry, and the intention is to debate it in Parliament during a normal procedure. The new government does not pursue changes of essence and that is why we consider as useful to present briefly those components of the framework law which make reference to the issues of the present study, in a critic-constructive approach.

Box 9. National education law – a law for rendering compatible educational supply with labour market demand?

The new education law intends to promote essential changes that would lead to increasing the quality of education.

The main provisions which, at least at declarative level answer to the need of approaching/rendering compatible the finalities of education – knowledge and competence – with the demand of the labour market:

- Establishes as organisation and functioning principle of the public education service – lifelong learning (Art 6 k), as for the first time is approached in an integrating manner the need and right to continuing education;

- Defines as main finality of education and vocational training – the training of competences (understood as a multi-functional and transferable assembly of knowledge, skills and aptitudes required for employment and participating to the functioning and development of a sustainable economy (Art 7 1c);

- stipulates that education and vocational training contribute to creating and assuming a set of values guiding the behaviour and career of the beneficiary ensuring labour market integration (art 7 2);

- stipulates as instruments of consultations/cooperation in the educational process the social dialogue and partnerships with institutions of the civil society and with the business environment (Art 13 1);

- education shall generate key-competencies, specific competencies and advance competencies for insertion into active life (art 22 2);

- promotes informal education as way of obtaining competencies on the job (Art 22 4c); validation and recognition of non-formal and informal education for employment (Art 25 4);

- establishes the deductibility from the tax on profit or on income of the expenditures for continuing training (apprenticeship, reconversion/re-qualification of unemployed, gaining entrepreneurial skills (Art 24);

- institutes the responsibility of the Community Centres of

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Permanent Education in promoting programmes of vocational reconversion and of entrepreneurial training having as bases studies and analyses regarding training needs (Art 28);

- establishes the possibility of organising practice stages on the technological path together with economic agents (these may grant scholarships and may endow the practical training rooms of the schools, benefitting of fiscal facilities) (Art 38);

- the educational supply of higher-education on cycles and studies' programmes is correlated with the requirements of the labour market and with the development of the social life, based on some economic and social forecast studies; this correlation is done by the Ministry of Education, Research and Innovation together with employers' organisations and social partners (Art 73 11);

- the finality of university bachelor studies is to ensure a qualification level adequate to exercise a profession in view of insertion on the labour force market through corresponding general and specialised knowledge, and the practice stages are compulsory (Art 79 5-6) ; another finality is defined as accumulation of vocational and transversal competencies (Art 81 1);

- master studies may be organised in partnership with economic agents, professional associations and/or public institutions that would answer to the demands of the labour market (Art 83);

- university doctor's studies may be organised also on request of public institutions or other interested stakeholders with financing ensured by the aforementioned (Art 88).

The provisions of the new law, even though very general, and more principles than operational represent a step ahead in changing education in an instrument/service for personal development in view of a performance active life and of human development. Permanent education in the understanding of the new law, is focused on pupil/student "in a way that would endow him/her to be employed, to exercise his/her profession and to integrate easy/to be mobile on the labour market" (Art 117). Clear stipulations are lacking which would make explicit the relationship and position of education against the other providers of continuing training (that is, the regulation of continuing training during the entire life span is provided for in a single article (Art 98) which comprises six paragraphs on an A4 page). Also, there is no clarification about the relationship between the Ministry of Education and the Ministry of Labour, which in its turn has

clear and important responsibilities related to the adjustment of the labour force to the knowledge and competencies requirements of the labour market (through NALF is substantiated the need of training, and the NCACVT are authorised the providers of continuing training and the courses are certified). The functional links between formal, non-formal and informal education are stipulated in a far too broad way and instruments and mechanisms of rendering them operational are lacking. At the same time, education outcomes are stipulated with respect to their certified quality but with a general character. We appreciate that, in order to become operational, this law requires methodological stipulations and complementary regulations, as to the contrary it will remain another theoretic development of the education and lifelong learning reform, without or with very limited finality in practice.

3.4. Inequalities in trainings; discriminations regarding the access to the acquirement of new professional competences

The relevant regulations related to the promotion of non-discrimination have taken into account:

*a) the access to vocational trainings, without discrimination related to the nationality of the persons.*⁸⁸

The principle of equal treatment based on nationality is very important for a uniform interpretation of the four liberties (ECJ).⁸⁹ Maastricht Treaty introduced European citizenship that amended the general provision related to non-discrimination (according to art. 12 EC „Within the scope of application of this Treaty, and without prejudice to any special provisions contained therein, any discrimination on grounds of nationality shall be prohibited.”). The European Union Charter of Fundamental Rights (2000 and 2007) extends the possibility to interpret non-discrimination (for the time being, this document has no mandatory judicial value). It is added, in this framework also the provisions adopted in the framework of the free movement of persons (Directive 2004/38/EC)⁹⁰.

⁸⁸ Paul Craig, Grainne de Burca, op. cit., p. 942.

⁸⁹ 33/74, Van Binsberger.

⁹⁰ Directive 2004/38/EC of the European Parliament and of the Council of 29 April 2004 on the right of citizens of the Union and their family members to move and reside freely within the territory of the Member States amending Regulation (EEC) No 1612/68 and repealing Directives 64/221/EEC, 68/360/EEC, 72/194/EEC, 73/148/EEC, 75/34/EEC, 75/35/EEC, 90/364/EEC, 90/365/EEC and 93/96/EEC, OJ L 158, 30.4.2004, p. 77–123.

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The long-term resident benefits of equal treatment with the one applied to the national remittances regarding, among others (Article 11 of the Directive 2003/109/EC)⁹¹:

- the access conditions to a paid job and to an independent activity, with the condition that the activities in question to not have any connection, even occasional, with the exercise of the public authority, as well as the employment and work conditions, including the dismissal and pay conditions;
- the education and trainings, including allowances and scholarships, according to the national legislation;
- accreditation of the diplomas, certificates and other professional qualifications, according to the applicable national law procedures;
- social security, social assistance and social protection as they are defined in national legislation.

Box 10. The interpretation of the non-discrimination clause

The consequence for the case-law field of the introduction of the *European citizenship* was the extension of the *ratione personae* scope, from the worker (more limited) to the citizen.⁹² There is a settled case-law as Article 59 of the Treaty [in the present, Article 49 EC] claims not only the elimination of any discrimination of the service provider established in another Member State, on the grounds of nationality, but also the elimination of any restriction, even if it is applied in a different way to the national providers and to those from another member states, if it is of such a nature as to prohibit, to limit or to make less attractive the activities of the provider established in another member state, in which he delivers similar services.⁹³

One interpretation of the Court can be found in the *Gravier Case*⁹⁴, in which the decision it was in the sense of removing a tax for the foreign students, as being a discriminatory tax. In this case the majority of the member states

⁹¹ Council Directive 2003/109/EC of 25 November 2003 concerning the status of third-country nationals who are long-term residents. According to Article 3, the Directive applies to third-country nationals residing legally in the territory of a member state (it does not apply to third-country nationals who reside in order to pursue studies or vocational training).

⁹² C-85/96, Martinez Sala/Freistaat Bayer.

⁹³ Criminal proceedings against Jean-Claude Arblade and Arblade & Fils SARL (C-369/96) and Bernard Leloup, Serge Leloup and Sofrage SARL (C-376/96)

⁹⁴ C 293/83 cit. Supra.

agreed that they have the right to discriminate in favour of its own nationals in the educational field.⁹⁵ In the *Angonese Case*, ECJ decided that the interdiction of discrimination on the grounds of nationality applies not only to the measures adopted by the state but also to those of the private employers.⁹⁶ In *Grzelczyk Case*⁹⁷, a French citizen (Mr. Grzelczyk), started his academic studies in physical education at the Catholic University of Louvain (Louvain – la – Neuve) and for this purpose he established his residence in Belgium. During the first three years of studies, he assumed the expenses with the maintenance, accommodation and studies, having different minor jobs and obtaining payment facilities. At the beginning of the fourth and the last year of studies, he asked to the Public Centre for Social Aids the minimex payment. In his report, the Centre underlines that Mr. Grzelczyk worked hard to pay his studies, but the elaboration of the thesis and the ending of the stage made that the last academic year to be more difficult than the previous ones. This was the reason for which, through the Decision from 16 October 1998, the Public Centre for Social Aids gave to Mr. Grzelczyk the right to minimex, calculated at a rate named „isolated”, for the period 15 October 1998 – 30 June 1999. But the minister refused the payment due to the fact that Mr. Grzelczyk was not a Belgium citizen.

The question was if the European citizenship excludes the obligation provided in Directive 93/96 to have financial resources.⁹⁸ The Court underlined that „The fact that Mr. Grzelczyk does not have Belgium citizenship there is the only obstacle to receive the minimex and, thus, it is obvious that we are in the presence of discrimination on the grounds of citizenship. (para. 29). *In the scope of the treaty, such a discrimination it is regularly prohibit by art. 6 of this. In the present case, this article has to be read in corroboration with the provisions from the treaty regarding the Union citizenship in order to establish the scope of this.*” (para. 30)

In fact, the status of the Union citizenship is intended to be the fundamental status of the member states’ nationals that allow to those who are in the same situation to obtain, irrespective of their citizenship and without prejudice the exceptions provided for this situation, the same judicial treatment.

The Court recalls the *Martínez Sala Case* (para. 63),⁹⁹ considering that a citizen of the Union who lives legally on the territory of a host member state can

⁹⁵ E. IGNĂȚOIU Sora, *Egalitate și nondiscriminare în jurisprudența Curții Europene de Justiție*, Ed. C.H. Beck, 2008, p. 37-38. The problem was not of the political declarations or even of the support in the case, but the lack of the grounds for the extension of the non-discrimination interpretation in the educational field.

⁹⁶ C 281/98, *Roman Angonese*.

⁹⁷ C 184/99, *Grzelczyk*

⁹⁸ The Directive was abrogated through the Directive 2004/119/EC.

⁹⁹ C 85/96, decision from 12 May 1998.

¹⁰⁰ C. 197/86, decision from 21 June 1988 *Steven Malcolm Brown v. The Secretary of State for Scotland* (preliminary decision, request formulated by Court of Session from Scotland) „Non-discrimination – Access to the academic studies – The aid for training”.

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stand on the provisions of art. 6 from the treaty in all situations that falls under the *ratione materiae* scope of the European law. The *Brown Case*¹⁰⁰ represents a moment in which the ECJ gets back, considering that the aid conferred to the students for maintenance and for professional education does not enter into the scope of art. 6 EC.

b) promoting gender equality on the labour market; equality of treatment

In the Council Directive 75/117/EEC of 10 February 1975 on the approximation of the laws of the Member States relating to the application of the principle of equal pay for men and women¹⁰¹, one of the grounds for adopting the Directive was the Council Resolution of 21 January 1974 concerning a social action programme¹⁰² which had as a scope to allow the approximation of the life and working conditions on the progress way, as well as the balanced economic and social development of the Community, and through which it is recognized the priority character of the actions that must be undertaken in favour of women regarding the access to employment, vocational trainings and professional promotion and to work conditions including payment.¹⁰³

Council Directive 76/207/EEC of 9 February 1976 on the implementation of the principle of equal treatment for men and women as regards access to employment, vocational training and promotion, and working conditions¹⁰⁴. According to Article 1 “the purpose of this Directive is to put into effect in the Member States the principle of equal treatment for men and women as regards access to employment, including promotion, and to vocational training and as regards working conditions”, in certain conditions, “social security”. This principle is named “the principle of equal treatment.”

The Council Directive 97/80/EC of 15 December 1997 on the burden of proof in cases of discrimination based on sex¹⁰⁵ recalls in paragraph 3 the provisions of the Community Charter of the Fundamental Social Rights of Workers on equal treatment for men and women that – „ action should be intensified to ensure the implementation of the principle of

¹⁰¹ OJ, special edition in Romanian language, chapter 05 vol. 01 p. 156 – 157.

¹⁰² OJ C 013 , 12/02/1974 P. 0001 - 0004

¹⁰³ Article 2 provides the exceptions that are taken into account for the member states, and article 4 provides the adoption of the necessary measures to apply the equal treatment principle regarding the access to all kinds and all levels of vocational orientation, vocational training, vocational development, retraining in order for the scope of the Directive to be realized.

¹⁰⁴ OJ L 39, 14.2.1976, p. 40–42.

¹⁰⁵ OJ L 14, 20.1.1998, p. 6–8

equality for men and women as regards, in particular, access to employment, remuneration, working conditions, social protection, education, vocational training and career development” (para. 16 of the Community Charter).

Each member state *shall ensure that the principle of equal pay for male and female workers for equal work or work of equal value is applied. With a view to ensuring full equality in practice between men and women in working life, the principle of equal treatment shall not prevent any member state from maintaining or adopting measures proving for specific advantages in order to make it easier for the underrepresented sex to pursue a vocational activity or to prevent or compensate for disadvantages in professional careers. (Article 141 EC).*

Regarding the educational and vocational training field, the Article 13 EC is applicable, that provides: *without prejudice to the other provisions of this Treaty and within the limits of the powers conferred by it upon the Community, the Council, acting unanimously on a proposal from the Commission and after consulting the European Parliament, may take appropriate action to combat discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation*

The „equal pay for equal work” approach was extended from the pay for the work performed to other fields: vocational training, employment, social protection, including retiring pension.

Romanian legislation complies with the EU rules and the concerns regarding its application –an ordinance against all forms of discrimination was issued in August 2000, and the Law regarding equal chances between men and women was adopted in March 2002 that took place in the context of placing the problem of equal chance in the attention of European Employment Strategy¹⁰⁶. The legislation against discrimination plays an essential role for rights’ protection, yet is not sufficient, because discrimination still shows under various shapes and kinds. In graduates’ case, the most frequent discriminations are met on the labour market with respect to experience, sex, age, appearance etc., as on employment and promotion vocational training and proof of competences are eliminatory restrictions in order to be considered as an eligible candidate.

¹⁰⁶ According to legal regulations discrimination means „any distinction, exclusion, restriction or preference made on the basis of the race, nationality, ethnicity, language, religion, social class, opinions, sex or sexual orientation, affiliation to a disadvantage category or to any other criteria that has as a scope or effect the limitation or the elimination of the recognition, usage or exercise, in equal conditions, of the fundamental human rights and liberties or of the rights provided by the law, in the politic, economic, social and cultural field of the public life” (Emergency Ordinance. 137/2000, art. 2).

Chapter 4. DEVELOPMENT OF PROFESSIONAL COMPETENCIES AND LINKING THE NATIONAL EDUCATION AND TRAINING SYSTEM TO LABOUR MARKET REQUIREMENTS

4.1. The action context of endowing youths' with competencies demanded on labour market. European milestones of adjusting education to labour market requirements

Each employee must and should maintain his/her competencies in a permanently changing environment, respectively to be able to: a) efficiently perform a variety of tasks; b) have the ability to solve various roles and circumstances; c) to have the availability and skills for continuing learning, for self-development, and change. Therefore, the educational system is increasingly shifting from *the knowledge/learning approach to the competencies-based approach*, without diminishing the important (essential) role of new knowledge as support for valuing aptitudes and acquiring new or “updated” competencies.

In order, maintain productivity and competitiveness, European Union Member-States have adopted proactive attitudes about adjustment to change and achieving balance between labour market and labour force supply. Hence, **forecasting future available jobs and anticipating requirements with respect to competencies** becomes necessary. In order to assist member states, documents have been elaborated to allow them detailing and defining at national level and in complementarity with the EU level guidelines, the priorities in correlation with their own potential and actual development possibilities of economic and social competitiveness niches. In this context, the European Union pursued to identify the best solutions of defining and anticipating knowledge and competencies demand and, at the same time the promotion of examples of good practices that would support new jobs' creation in all EU member countries, but also for training workers for the new jobs of the future, thus eliminating some of the discrepancies encountered today.¹⁰⁷

The main coordinates that may adjust the construction of the framework of developing professional competencies for young people, start with the prospects of economic and social development, defined through

¹⁰⁷ *Skills for Europe's Future: anticipating occupational skills needs*, CEDEFOP Series, Luxembourg Office for Official Publications of the European Communities, 2009.

strategies and take into account the needs, resources and the time horizon in which the necessary changes might occur. In the context of the present study, the most significant adjustment variables at European/international level are:

- The European/international labour market is undergoing **permanent changes**, due to new technologies, to the globalization process, the demographic ageing phenomenon and global warming;
- **the necessity of employment increase** and continuing the trend, encountered particularly in the last years of **shifting** employment from **agriculture and traditional industry towards the services' sector and the modern, knowledge-based industry**. The performed studies revealed that by 2020, three out of four Europeans will be working in such fields as insurance, healthcare, trade and education
- **Polarization of the system of competencies** through:
 - increasing the number of available jobs requiring higher education, the emergence of new, advanced professional competencies for these jobs, next to general ones referring to analytical spirit, communication skills, teamwork skills, computer literacy;
 - the parallel increase of the demand for jobs that do not require training above the general level, or which require a low volume of competencies¹⁰⁸; the associated competencies correspond to an average level of training – more than upper-secondary, but less than higher education. Such jobs are increasingly sought by immigrants from less developed countries, as they provide the advantage of relatively higher incomes than in the country of origin.
 - the adjustment process of the workers is quite difficult, presupposing **increasingly costly investments in the human resource**, requiring support mechanisms for repeated return to the educational system in order to

¹⁰⁸ The issue can be extensively debated since the US labour market has encountered this problem in the past few years. In a relevant paper of 2007 entitled „*America's forgotten middle-skill jobs. Education and training requirements in the next decade and beyond*”, Harry J. HOLZER and Robert I. LERMAN show that the demand for this type of jobs is still rather high (even if it decreased from 55% to 48% of the total of employed population, starting with 1986), but it is no longer of interest for students and the educational system when the education job vacancies are measured.

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improve/retrain, but also supporting youths' employment and career development.

Unfortunately, the current economic-financial crisis has slowed down the dynamics of this qualitative mutations, but has reiterated **the need for investments in education**, as support for economic turnaround by putting to good use the RDI outcomes (for changes such as promoting low carbon industries, etc). The present economic-financial crisis has emphasised **the need of significant qualitative steps within the educational system from the lifelong learning perspective**. The need for change has been assumed and clear guidelines have been drafted, especially at the beginning of this millennium. **The future of the European economy (and society) will depend on the skills of its citizens, as they, too, require continuing updating, specific to the knowledge based society** (The European Council from Lisbon, 2000). Moreover, investment in the human resource significantly boosts productivity and is quite attractive against the alternative expenses, both at microeconomic level and at social level, even in, or particularly during periods of crisis. The development/reform processes, such as the Bologna Process for higher education and the Bruges Process for vocational training, are important steps in order to ensure the performance of graduates on the labour market. The need for new knowledge and competencies also entails a parallel process of reform/adjustment of the educational systems in order to improve the quality and relevance of the school, of the university, adult education, vocational training curricula and the coherence of educational and training systems in the European area, in agreement with the European Qualifications' Framework. In the wider depicted context, **the expenditure (investment) in education represents net savings**, heightened by the positive externalities generated on medium and long term that adjust the economic growth and social progress factors. The change of the learning paradigm starts from governmental expenditures made as investments in knowledge, from the undeniable statement that education contributes to personal development, to social cohesion and productivity, and has a major impact on economic growth, thus cutting down social costs by preventing social exclusion, social problems and crime. The necessary increase of investments should result from a mix between anticipated public funds and increased private contributions (complementing, not substituting). The highest deficit of funding for European education and training is represented by the comparatively low contribution from private sources (companies and individuals). Assuring access to permanent education should aim all categories of individuals, all ages that continue or return for knowledge

improvement. Therefore, also the **scheme for promoting learning methods is integrating, and takes into account those active on the market, whether employed or not, and those who return (second chance), as well as new comers.** The vulnerability of each category and the risk of unemployment depend on certain factors, such as:

- Previous training and the updating degree of already gained knowledge and competencies;
- Individual flexibility vs. the dynamics of activities related to exercising the profession/skill to be acquired;
- Access and ability to use ITC services;
- The degree of using counselling for training/improvement in view of career access or (re)employment;
- The support policies on a local/national level;
- The cost of training and the financing sources ;
- The contents of the curriculum – flexibility and compatibility with the demands of the business environment ;
- The quality of trainers and the teaching methodology ;
- The relationship between theoretical and practical training, etc.

The training for the labour market starts during initial education, is deepened with respect to basic-competencies during secondary education and is gradually enriched with knowledge and competencies specific to the vocation. For secondary education is of significance with respect to training for labour market the moment of deciding on the vocational route, or on the training profile – school counselling is indispensable for avoiding early school leaving. Little is being done in this respect in Romania at present, although, from a legislative and institutional viewpoint, the necessary adjustments have been performed. However, what is still lacking is related to **the career development culture adequate to the actual individual potential, and not to the desires/options based on what’s “the trend” or on parents’ choice.** There are still necessary years of realistic and of essence implementation of reform for pre-university education, associated with increased exigencies with respect to the quality of education outcomes’ under all its aspects.¹⁰⁹

¹⁰⁹ Detailed reference to the secondary education reform, by linking the learning process with the insertion of graduates on the labour market is made in the previous study conducted by IER on education, respectively **Valentina VASILE, Gheorghe ZAMAN, Steliana PERȚ, Felicia ZAROJANU (2008) - Restructurarea sistemului de educație din România din perspective evoluțiilor pe piața internă și impactul asupra progresului cercetării (Restructuring the Romanian educational system from the perspective of the**

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Finally, tertiary education, i.e. undergraduate and postgraduate courses, brings the graduates closer to the employment demand specific to the knowledge based society. In this respect, bearing in mind that the “Bologna model” has been introduced rather recently, it is necessary to underline the elements that connects the training of graduates with the requirements of the labour market.

By acknowledging the need of lifelong learning, of implementing a national framework of qualifications and of defining employability as a priority, the permanent and necessary link is identified, between pre-university education, master university studies/postgraduate education and the vocational profile, the knowledge and skills required on the labour market.

Another important step in linking education outcomes to the ever-changing requirements of the labour market was the implementation of the National Qualifications’ Framework, the mutual awarding and recognition of diplomas and creating opportunities for **flexible educational routes**, including **procedures of recognising previous learning**. (The Conference of Ministers from Bergen in 2005).

4.2. National milestones of adjusting education to the requirements of the labour market. National system of competencies’ training

In 1990, the education system was regulated by the Education Law of 1978 and vocational and technical education was characterised by a high and narrow specialization. Vocational competencies were gained during the period of secondary and higher education and were based on a close cooperation between education institutions and the economic environment – colleges and vocational schools under the patronage of enterprises and the practice during higher education implied activity within economic entities, while final graduation works included also a practical component, realised with the support and within the enterprises. The hours of practical activity were sustained in cooperation with or exclusively by the experts of the enterprises, the practical competencies and skills being gained through direct involvement in the enterprises’ activity. In the last decade before the revolution this activity received an increasingly higher degree of formalism, so that the diplomas and certificates obtained upon graduation highlighted

domestic market events and the impact on the progress of research), the European Institute of Romania, Strategy and Policies Studies, study no. 2, and that is why the present study makes specific reference to the higher education reform.

what should have been the knowledge of the graduate and which competencies he/she should have had. Employment of young graduates after finishing studies was made by repartition in a corresponding job to the profile of the graduated school and to the obtained qualification. Employment was made without any other tests or examinations. In order to be able to answer to the tasks of the workplace the young individuals underwent a training stage on the job under the guidance of an expert in the field. Periodically, improvement courses were organised at the level of the entities or through the industrial centrals' at the level of the (sub) branch of activity. These courses were compulsory and conditioned the advancement to a superior wage level or career promotion, yet they had a relatively higher degree of formalism particularly with respect to the final evaluation after finishing the courses. The opportunity was provided for learning and vocational improvement, but the quality of learning remained at the latitude of the individual, just as the valuing of outcomes in practice, as well. The formalism of the CVT system in the respective period was supported by the safety of lifetime employment (all individuals had to have a job) and by the non-performance incentives system for labour performance.

After 1990 the education system was disconnected from the business environment, the economic restructuring and privatisation have practically annihilated the old links between school and enterprises, the school institutions undergoing reform without considering the demand on the labour market. The specialisation of secondary education was diminished and higher-education followed a rather chaotically than targeted development. As result, the gap between demand and supply increased on the labour market – de-structuring, incompatibility from the viewpoint of school gained knowledge and competencies, and the school curricula remained behind as compared with the demand of the market for the majority of economic-social activities. It was estimated by the then governing authorities that the market and competition shall regulate the need of human resources both under quantitative and qualitative level. Yet, gradually, but still late as compared with the needs of the labour market, awareness emerged about the need for some coherent measures and policies for ensuring the vocational training of youths, avoidance of insertion unemployment, re-qualification depending on the demand of the business environment, etc. As already mentioned in the study, reforms were initiated on three directions – vocational education reform, higher education reform and building up a CVT system. The three educational components were reformed and developed relatively autonomously, the measures of establishing the systemic coherence were either too few or inadequate. The

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decision of integration into the European structures and the preparation period up to 2007 have forced towards a higher coherence of the system, but the measures which were taken were, in general, not radical but pursued to adjust existing systems. As result, some of the dysfunctions were maintained, the systems became more and more closed up in relationship with the connections and communication channels that should have existed between them, and **were oriented more on demand and compatibility with external markets than with the need of labour resources at national and/or local level.** The compatibility with EU requirements was pursued and the external recognition of diplomas and qualifications, while the internal coherence of the system at national level was forgotten.

Currently, there are no open learning routes, alternatives of gaining knowledge/competencies within the formal/informal/non-formal system, permanent education is much too less oriented towards future needs of the labour market, and there are questions about diploma recognition particularly when the shift is made from one educational system to another (from the informal system to the formal one, for instance), and there are significant qualitative differences with respect to the outcomes of education, to the largest extent due to some non-updated/unadjusted to the needs/uncorrelated curricula with similar educational paths. In addition, in general, the quality of the education system decreased, including with respect to human resources within the education system.

The measures of the last years related to reconsidering key-competencies, the finalisation of the TVET reform, the regulations within the sphere of adult education, acceptance of the necessity of promoting permanent education as a national priority, the changes in the education evaluation system, etc. have generated converging evolutions towards a coherent and performance permanent education system, adjusted to the needs of the labour market and open to the future demand of knowledge and competencies at national and international level.

Currently, in Romania, there is still **no well-defined strategy that should integrate training** (educational subsystems) and which is credibly anchored in the European area. There are some strategies on the way of being finalised which consider components of lifelong learning or which shall be applicable only as of 2013-2020. Statistical data and analyses realised at the level of the Romanian educational system, respectively comparisons with other European countries show the weak performance in implementing existing strategies.

Box 11. Strategic documents on learning for the labour market

- a) The Strategy of Romanian Higher Education for 2002-2010, for instance, only outlines the general principles, the specific ones, the strategic objective – the structural improvement of higher education – and the operational objectives, without giving any details on the resources and the implementation instruments;
- b) The National Strategy for Sustainable Development in Romania – horizons 2013-2020-2030 provides as a separate chapter, for inter and intra-sectorial themes, education and vocational training, scientific research and technological development, innovation, but the approach is very similar to the one presented above;
- c) The integrated strategy for developing human resources from the perspective of lifelong learning, which is the basis of the SOP HRD for 2013-2020 – under way at the Ministry of Labour;
- d) On a strategic level, the main operational instrument for ensuring quality in the field of human resources is The Sectorial Operational Programme for Human Resources Development (*SOPHRD*), where the fundamental objective is the development of the human capital and the increasing competitiveness, by linking education and lifelong learning with the labour market and ensuring increased opportunities for future participation on a modern, flexible and inclusive labour market¹¹⁰;
- e) Phare projects in progress until the end of November 2009, implemented on the system of ensuring quality in Romanian higher education and on the active adjustment of higher education to the demands of the labour market.

Quality Education for the Labour Market – Phare Project Ro 2006/018-147.05.01, 01.12.2008-30.11.2009, Beneficiary: ARACIS.

The knowledge based economy changes the demand for skills and competencies on the labour market (OECD, 2001). **The basic general education supplies graduates with academic and cognitive competencies and the so-called** vocational competencies, such as: communication, negotiation, teamwork, problem solving competencies, etc, are important for the practices of the new organisation. The permanent updating and creative

¹¹⁰ FSE-POS DRU projects in progress: Doctorate in Excellence Schools – Assessing the quality of research in universities and increasing recognition through scientific publishing, 2008-2011, beneficiary: UEFISCSU; Doctoral Studies in Romania – the Organisation of Doctoral Schools, 2008-2011, beneficiary: UEFISCSU; Quality and leadership for higher education, 2008-2011, beneficiary: UEFISCSU; Quality assurance of Romanian higher education in a European context. The development of academic quality management at an institutional level, 2008-2011, beneficiary: ARACIS; the Development of an operational system of qualifications in higher education – DOCIS, 2008-2011, beneficiary: ACPART.

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application of knowledge in order to achieve the aimed objectives will become very important factors for the success of graduates (Seltzer and Bentley, 2000). These objectives will be achieved when the educational system will produce creative learning, i.e.: the ability of identifying new problems, the ability of transferring the acquired knowledge while solving a problem in order to creatively solve another problem; learning as an incremental process; the ability of staying focused in order to achieve an objective.

This is the reason why the general and specific training of an individual is nowadays measured according to completely different criteria than the ones applied in the past. Nowadays, when all fields undergo in-depth change and diversification, it is difficult to achieve a rich volume of diverse knowledge that covers to significant share information from several fields. It is important to know how to act and where to find what is necessary in order to efficiently substantiate strategies, tactics and projects for the individual or collective interest.

The key competencies were revised in 2006, by redefining the European Qualifications Framework for lifelong learning, as the concept of competency has developed considerably, given the emphasis on the dynamics of incorporating RDI and the widespread distribution of ITC services. The framework identifies and defines, for the first time at European level, the key competencies individuals should acquire for personal development, social inclusion, and active citizenship and for employability in knowledge based society.

The 8 key competencies include not only *traditional competencies* (native language; foreign languages; basic Mathematics, science and technology; computer literacy), but also a series of *transversal competencies* (learning to learn – which requires creativity; civic and social competencies; initiative and entrepreneurial spirit (linked to creativity); cultural expression competence. Many of these competencies overlap and are interspersed, but this framework highlights other aspects as well: critical thinking, creativity, initiative, problem solving, risk assessment and decision making, aspects that play an important role for all key competencies (C.E., 2008).

A very comprehensive process of redefining the contents of the curricula and of the learning programmes throughout the educational route was initiated in Romania in 2008, initiative process which, in fact, emphasized and rendered dynamic the changes already underway in the reform process of educational systems for each level of study – pre-university, university, and CVT. Thus, the convergence process between systems as concerns the training of graduates for the labour market has signified a common orientation towards the development of a flexible and

market oriented learning model, under the conditions of building-up the components of the knowledge based society.

The finality of learning is better defined, both for theoretical knowledge and practical skills acquired. Upon graduation, there is a specific reference (in the qualifications or competencies certificate, annexed at the graduation diploma) to the competencies' area or gained elements of competencies acquired as a result of the completed training process. Each educational segment – according to the level of training – redefines the quality of the learning outcome by stipulating the acquired competencies.

For pre-university and university education, changing the curricula leads, on the one hand, to the adjustment of the learning process and to the reorientation towards permanently updated knowledge and competencies (depending on scientific progress and on the development of market requirements and the renewal of the business environment) and, on the other hand, to the adjustment of the learning technology. Thus, a first measure would be the *introduction of key competencies in the curriculum and analytical programmes*, and, another one would consist in *reflecting the changes paradigm which requires different approaches of teaching and learning* (EC, 2008), by emphasising the alternative ways of learning that promote creativity from the perspective of the transversal curriculum (CIDREE, 2004). Also, this can be achieved by using *appropriate learning support* and by *teaching methods focused* on developing the key competencies, as well as by the new and innovative way of assessing the outcome of the educational system.

Also, the *description of the qualification obtained on graduating a programme of studies* increases as importance, *which presupposes that the design of programmes' content (curriculum, analytical programmes) is realised by starting with the competencies*. It is necessary to establish the basic competencies for a qualification awarded upon completion of the studies and to assess them according to a set of national standards. These standards are established on the basis of the European Qualifications Framework and are developed on levels of training, professions and trades.

Box 12. The European Qualifications Framework

The European Qualifications Framework (EQF) is a way of structuring qualifications in higher education, vocational training, adult education and initial education, based on the knowledge acquired during the years of study and included in the general and specific key competencies. As term, the framework was initiated in 2004 when only 3 countries – France, Ireland and Great Britain –

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out of the present 27, had a national qualifications' framework and its completion is foreseen for 2012 when all qualifications from the EU will hopefully be included in the EQF. The motivation for creating this framework consists in emphasising and providing the graduates' with the opportunity of proving what they can do based on the acquired knowledge, as well as for the increased recognition of these qualifications and for encouraging those who wish to work and study anywhere in Europe.

Source: http://www.euractiv.ro/uniunea-europeana/articles%7CdisplayArticle/articleID_11961/Cadru-pentru-recunoasterea-calificarilor-la-nivel-european.html

Thus, the **National Qualifications Framework** is developed (for pre-university education, tertiary education and CVT). If at CVT level are developed the vocational standards or vocational training standards, with respect to education are defined the qualifications' and competencies' obtained during each cycle of training.¹¹¹ For instance, higher education trains and certifies the professional competencies and skills developed by the students for three levels of training: Bachelor's Degree, Master's Degree and PhD – matrix NCHESR (Annex 7).

The main **influence factors** of the changes in the field can be identified as follows:

- a) *Creativity*¹¹² and *innovativeness* – become usual competencies both in production processes (constantly changing, with accelerated dynamics of RDI results' absorption), and in the methods of learning.

The labour market will require adjustable competencies and continuing learning skills (OECD, 1995). Innovation, shorter life cycle of products and companies, all require employees with knowledge yet flexible and adjustable, with well developed skills and aptitudes.

Lifelong learning shall also be important (Karolz and Panis, 2004). Employees will have the skills for learning individually but they will also

¹¹¹ On a national level, ACPART through the project POS-DRU: **Developing an operational system of qualifications in higher education** (*Dezvoltarea unui sistem operațional al calificărilor din învățământul superior*) - DOCIS suggests the elaboration and implementation of the National Qualifications Framework for Higher Education – CNCIS. CNCIS describes the qualifications corresponding to the three cycles, established by Law 288/2004 on the organisation of higher education: BA, MA and PhD

¹¹² Creativity is defined both as an explicit priority and as an implicit requirement in all the agendas on supra-national educational policies, such as The European Occupancy Strategy, The Lisbon Strategy, and also in the Education and Training programme 2010 that has led to the transformation of educational structures and methods.

have adequate permanent learning programmes at their disposal. The rapid changes of structure and the emergence of new professions, as well as the modernisation of the existing ones require a new approach of the educational system.

An important factor that influences the professions on the labour market is the progress of science and technology (for instance information technology, biotechnology, nanotechnology, etc.).

The effect of technological advances on labour can be outlined for differently on each of the three levels:

- at macroeconomic level, technology can influence the structure of organisations and the methods of recruiting and selecting prospective employees;
- at mezzo- level, employees who work in different environments will have to interact in order to accomplish their professional activities; the job location will become even more flexible;
- at microeconomic level, employees will have to constantly adapt their knowledge, skills and abilities to the changes brought about by technological change.

b) Entrepreneurship – the social development model, further to be pursued in Europe, presupposes enhanced economic growth, more new companies, more entrepreneurs and more profitable SME's. Thus, all the competencies of the graduates must be developed, but the most important of these is thought to be **entrepreneurial culture** and this is why the European Commission proposes, in this case, a special approach. In order to achieve this, the educational system must undergo a reform that would require the spending or investment of considerable resources (human, but especially financial).

The expenditure for education means investment, the most valuable of all, even if it is considered as one of the most expensive, in the context of the world economic crisis. (Drucker, 2008). Human resources must be approached as investments, under the conditions of the augmented the globalization process. Thus, selection becomes more rigorous, there is increased demand for *qualified graduates, with vocational competencies specific to their activity area but able to adapt to the dynamic requirements of the labour market*. Higher education has a paramount role in reaching this particular target.

Entrepreneurship requires creativity, innovation and risk taking, as well as the ability to develop and implement successful projects. The teaching/learning/assessment methods must be changed, as there is

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increased need for practical work, assuming fictitious roles in case studies and visiting local enterprises. Entrepreneurial education increases the chances of setting up new companies and cutting down unemployment. The Commission recommends as measures: a) cooperation between different departments, at the level of national and regional authorities, so as to develop a strategy with clear objectives that would cover all educational levels; b) the curriculum for all levels should include entrepreneurship as a clear objective of the educational system. If we refer to higher education, for instance, the necessary measures recommended by the European Commission take into account: a) integrating entrepreneurship in various courses, especially scientific and technical fields; b) the need for authorities to ensure the support for vocational training of the teaching staff in the field and for developing networks that can disseminate the acquired good practices; c) encourage and support the mobility of the teaching staff between universities and the business environment, including the involvement of businessmen in the teaching process. Such measures are being adjusted/particularised at national level so as to enable educational institutions and other organisations within the educational system to be able to develop such competencies for their own graduates.

- c) *ITC services* that emphasize the importance of flexibility in the methods of learning and working (distance learning, e-work, etc).

Work becomes increasingly flexible as the information technology changes both the duration of work, as well as of leisure time. Technological changes can lead to the delegation of responsibilities and autonomy in the case of hierarchical management, thus creating a new class of independent workers and a new wave of virtual organisations (Wagner, 2004), that are more flexible. In an increasingly larger number of organisations and sectors, individuals shall work as independent employees and therefore they will no longer identify themselves with a particular company or group. Teleworking might become very common in the future and it may also lead to the variety of job opportunities (Britton, Halfpenny, 2004). Two major consequences may occur after the introduction of information technology at the workplace: the dispersion of workforce and work differentiation. Nevertheless, it is argued that, despite the changes introduced by information technology at the workplace, the formal and informal potential of human interaction is very important in order to generate cohesion, trust and maintain competitiveness.

The development of specific competencies for using ITC services will also increase access to lifelong learning and will lower time and space barriers for complementary education.

4.3. The mobility of new vocations, skills, and competencies demand vs. the answering capacity of the education system

The main factors to influence the labour market in the next 10-15 years refer to: technological advancement; demographic factor; economic globalization (Karolz and Panis, 2004)¹¹³. These forces will restructure both demand and supply of workforce, as well as influence the changes in working practices, with direct consequences on the educational system.

In the case of the technical system of education, for instance, one out of five disciplines changes the level of knowledge in less than a year (Bundesministerium für Wirtschaft und Technologie and Bundesministerium für Ausbildung und Forschung [the Federal Ministry of Economy and Technology and the Ministry of Education and Research in Germany], 2002). Similar developments are encountered also in the case of other disciplines as well, meaning that the performance of the educational system shall presuppose mobility and anticipative ability with respect to the demand for knowledge and competencies on the labour market.

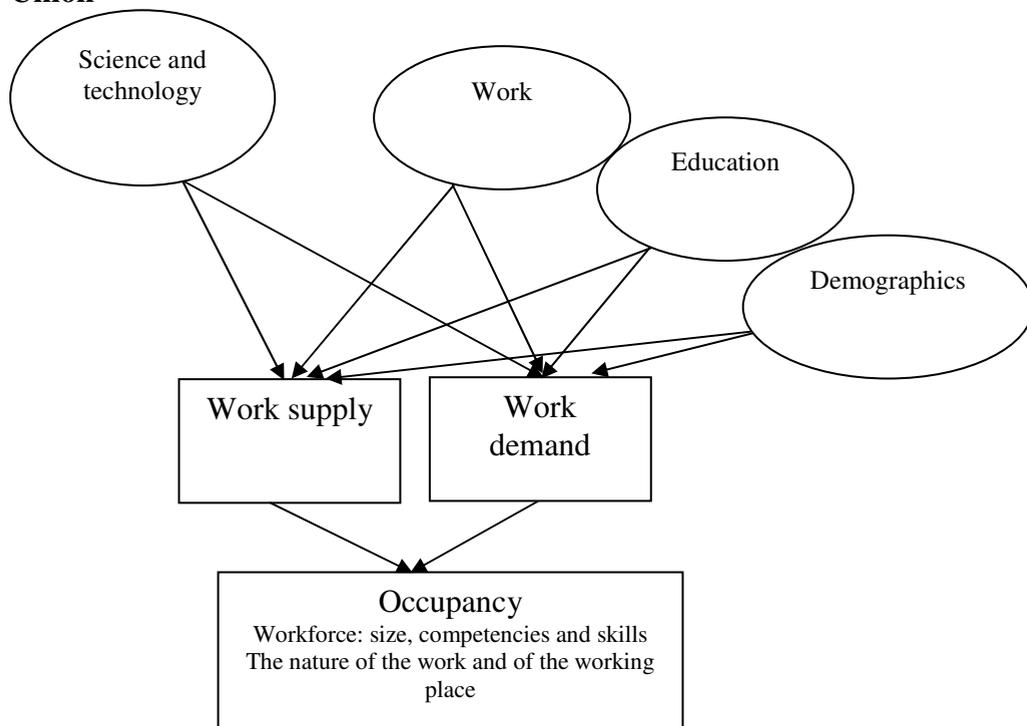
The European forecasts on the competencies and qualifications need that should be held by European workers in order to remain competitive in the knowledge based society estimate that, by 2015, **European economies will focus on knowledge based sectors that will require higher qualifications** in a percentage of about 30% of the total employment.

The employment demand depends on the economic development, as well as on the jobs' type and the necessary qualifications/competencies. The competencies required today are increasingly less in accordance with the long-term forecasts of the labour market demand because: knowledge changes, and those acquired need updating; it is said that what you learn in the educational system today will only last you for half your life; the volume of information increases (for instance, the Internet); competition leads to the generalisation or specialization of the workforce competencies; there is an identifiable trend of generalisation in the detriment of specialisation.

¹¹³ A relevant work in this regard, having as purpose the information of decision makers about the issues regarding education, training and other specific elements of the labour market is Lynn A. KAROLY, *The 21st Century at Work. Forces Shaping the Future Workforce and Workplace in the United States*, RAND CORPORATION, 2004.

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Figure 1. Factors that influence the future workforce of the European Union



Source: Changing professions in 2015 and beyond, European Communities, 2006.

Despite some studies¹¹⁴ on the possible changes for the future labour market, there is not enough data in Romania at micro and macroeconomic level which would allow for the efficient adjustment of the educational system. Additionally, the increased interspersing of the economic processes among countries presupposes a national approach of the changes in education and those on the labour market in a European and international context. The changes are expected to be more intense in economies with high fluctuations of the demand and high development paces, leading to a business environment characterised by high flexibility of work. Employees

¹¹⁴ The studies are: *The Evolution of jobs on the labour market in Romania at the dawn of 2010 (Evoluția ocupațiilor pe piața forței de muncă din România în perspectiva anului 2010)*, conducted by INCSMPS, for 1997-2002. Also, the same group of authors has conducted the study *Comprehensive surveys on the workforce demand in Romania (Anchete comprehensive asupra cererii de forță de muncă)*, in 2008.

should be able to cope with losing their jobs, at least once in their entire career. Nevertheless, in a rapidly changing environment, workers must keep up the pace and will probably encounter difficulties upon returning to the vocational route after a longer period of absence on the labour market or unemployment. This will trigger the need to be permanently informed and updated with regard to the new knowledge and increasing the need for lifelong learning.

Competencies may be seen as the foundation of professional qualification/training. When assessing the competencies of a graduate in view of his/her vocational insertion, there should be taken into account the existence of the set of specific competencies for the respective profession, as well as of the other additional inter and intra-disciplinary, and complementary competencies (Annex 8).

In the current context, of in-depth renewal of key-competencies it is also necessary to reconsider the old educational models. Due to the desire to dispose of competencies for the future labour market, the new models may be developed from the type of desired competencies towards restructuring and renewing the disciplines contained in the curriculum, which shall lead to the emergence of specific competencies, approached as a function of aptitudes, skills and competencies. The difficulty consists in merging these three components of competencies in developing, delivering and evaluating the stages for obtaining the respective diploma.

A programme of study must assist in training the graduates' competencies. The competencies of a certain field also have consequences on the structure and drafting of the curriculum (Annex 9 presents a model of competencies in the field of science and technology, based on a programme of study seen as a series of competencies that a graduate must acquire¹¹⁵). The final competencies required on the market must be studied by identifying and explaining the attitudes, aptitudes and knowledge. The modules that contribute to training specific competencies must assure that the exit output (the graduate) meets the expectations with respect to the particular competencies on the labour market.

The existing curriculum includes clusters of modules that each lead to certain competencies, but without them being approached as a whole. The overlap and merger of the components is not explicitly built in the initial model. The final model must be integrating, laying emphasis on the fact that

¹¹⁵ S. WILLIAMS, T.M. HUA, *A Competency-based Approach to Polytechnic Education for the Learning Age*, Paper presented at MERA-ERA Conference: Educational Challenges in The New Millennium, December, 2001, Malacca, Malaysia.

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all teaching-learning experiences rely on the development of all the components of the global competence, respectively of vocational skill, and that the process of evaluation must be conceived in such a way as to simultaneously highlight all the knowledge, aptitudes and skills. A performance model presupposes next to the careful (re)thinking of the curriculum, of the modules/courses (based to a large extent on the professionalism of the teaching staff), also the highlighting of the performance indicators required in order to certify the existence of the competencies, the identification of the specific competencies generated by this model, the explicit articulation of the necessary attitudes, aptitudes and knowledge, the identification and classification of the various modules and courses that contribute to training and improving the different competencies, the analysis and review of the types of evaluation and grading.

The main challenge with respect to lifelong learning components from the viewpoint of graduates' training for labour market is represented by the relatively short life-cycle of knowledge and competencies which leads to the permanent need of the systems' (pre-university, university and CVT) to be predictable and compatible with the demand of the employers. The lack of answer, or a delayed reply shall lead to the slowing down of the RDI outcomes' absorption (both of the technological and non-technological innovation), and hence increasing the gaps against the other EU member countries.

Chapter 5. PRIORITIES IN IMPROVING CAREER PERFORMANCE OF YOUNG GRADUATES

5.1. The general framework of promoting education for labour market

The millennium development objectives, the need of sustainable economic and social development, the demographic evolution and the development of the knowledge-society for competitiveness and increasing life standard emphasise the **need of an education targeted towards the demands on the labour market, in a coherent, multi-dimensional framework and of a strategic vision based on partnership and participation.** The development of support policies involves for each of the education sub-systems during the entire life span (pre-university, university and CVT) the promotion of some common values in the efficient, economically management of resources and maximisation of effects, their implementation being supported by the cooperation of the stakeholders from the economic, social and civic environment, etc.

The expected finality is represented by the efficient employment of youths on the labour market and the promotion of active citizenship, which presupposes at least the following:

- **compatibility between labour market demand and the supply of the educational system**, as support for the swifter insertion of young graduates on the labour market;
- **putting to good use the potential of knowledge, competencies, skills/aptitudes** gained within education (initial and continuing) on the job by delivering productivity and quality to the employer;
- **flexibility and adjustability on the labour market**, an operative and innovative answer to the challenges of the business and social environment dynamics – technological progress absorption, orientation towards the “low carbon economy”, management of economic cycles, diminishment of the effects of the economic and financial crisis.

Permanent education for work generates a positive impact on the society, realising superior benefits to gains at individual level by positive externalities on medium- and long-term. The benefits are distributed within society along the following routes/channels:

- a) **economic.** The impact of education on labour market is the most significant and generates triggering effects: increases labour

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performance, heightens the capacity of generating and using technological and non-technological progress, the economic environment becomes more creative, the dynamic of renewing the supply of goods and services increases just as their quality, and the business environment is permanently stimulated as competitiveness creates new needs of education and innovation. Labour force, particularly young graduates are flexible to change, even generate it and are more innovative in finding new solutions, methods, instruments, procedures for realising the general objective of each business/activity – satisfying a need;

- b) **of promoting policies.** Technological progress and knowledge-society generate the need of high performance experts with critical thinking, communication competencies, and involvement in the implementation and evaluation of measures, policies, strategies;
- c) **social inclusion.** Permanent education for labour market increases employment chances ensures equality of opportunities restricts and even hinders the promotion of any kind of discrimination for employment and participation to the society life. The increased opportunity for employment reduces/eliminates the threat of poverty (the poverty rate of those aged between 16 to 24 years is of 21% in the year 2007, with 4 pp lower than the national average, Eurostat data), and is a factor of welfare and human development, and an instrument of changing culture, including work culture;
- d) **diminishment of labour migration and of brain drain flows.** Adjusting learning to local and national needs and creating career-wise attractive and remunerative jobs stabilises the labour force through the opportunities of career performance, career development and financial comfort required at the beginning of the road – setting up a family, the purchase of mobile and real estate goods, financing cultural and recreational consumption, etc. The investment in education is returned within the national economic system generating resources for better financing of lifelong learning for present and future generations;
- e) **active citizenship.** Education for participating to satisfying the economic, social internal (and international) cultural demand creates the premises of extending the active involvement also outside the workplace, to promoting the principles of active citizenship, and hence gaining considerable public benefits even though difficult to commensurate;

- f) **international cooperation.** Gaining key-knowledge and competencies, common at European level and closing the technological gap on one hand, and the Bologna Process, the Lisbon Agenda and the setting up of the European Research Area on the other hand lead to cooperation and acceptance of multiculturalism.

The aforementioned effects bring significant non-material benefits, develop a new culture of learning and of active life, and to a certain extent prepare the labour force for a globalised economy, competitive, training demand intensive, and generate specific competencies to the knowledge-economy.

The benefits of education on labour market may be measured by impact indicators, such as:

- *marginal increase of the individual wage based on increasing the average period of schooling.* Recent researches suggest that in Europe as a whole, one additional year of schooling increases the level of the individual wage by approximately 6.5% and up to 9% in countries with less rigid wage structures. In the close, positive connection between education and wage, college education represents a threshold from which any additional type of education brings along a special reward (Education at a glance, OECD, 2002.)
- *unemployment diminishment.* Records have shown, also that the unemployment rate decreases together with the levels of higher-education, these diminishing the involved social costs. It is obvious that the employment rate increases with the reached education level (Eurostat, Survey on labour force, quoted in the Action Plan on Skills and Mobility, Commission Communication COM(2002) 72).
- *Increasing profitability.* Comparing the estimated rates of the benefit for the different stages of the education system, it results that college education turns into the basic level for the knowledge economy education. It is obvious that the period (and hence costs) of the unemployment periods decrease substantially, with the extension of schooling from secondary education to college (Training and Learning for Competence, CEDEFOP; 2001)

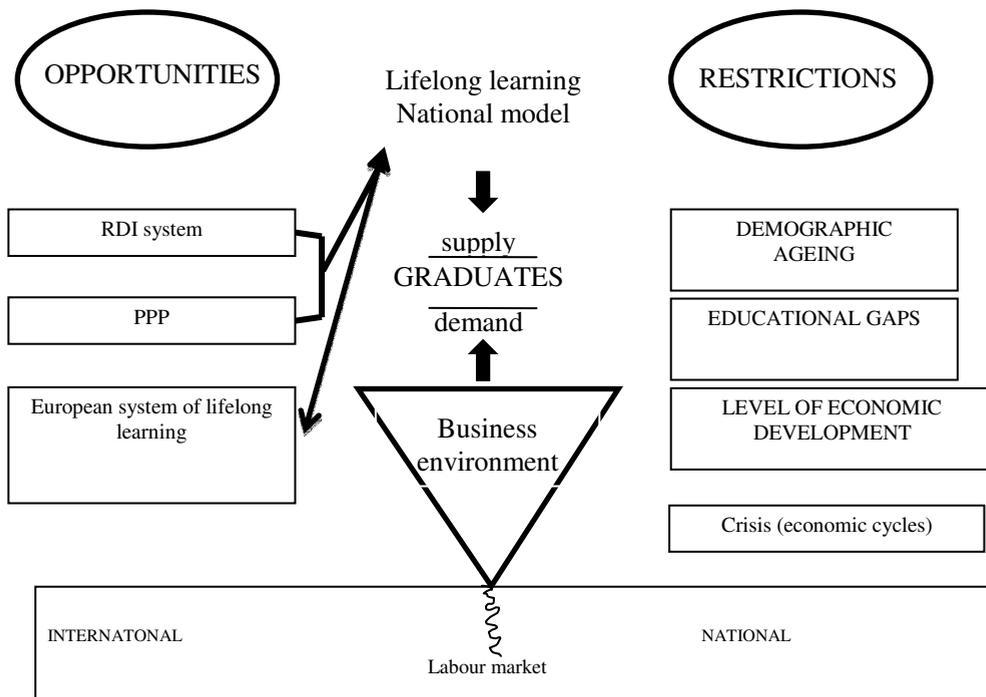
The facilitating system of education for labour market is supported by the European Framework of Lifelong Learning – **a national model** - that should have as *basic coordinates* the public-private partnership and the promotion of RDI outcomes. The **Restrictions** of a national model of

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education for the labour market consider, on one hand, the impact of demographic ageing and educational gaps as compared with the European area, and on the other hand the economic development level and the impact of the economic and financial crisis. Figure 2

The facilitating instrument is represented by the consistent and sustained investment in education, from multiple sources and with the participation of all interested partners – including beneficiaries. The approach of the investment through the prism of efficiently and economically use presupposes the promotion of an **early prevention strategy** (school guidance and counselling), apt to diminish significantly correlation failures between education and training and the requirements of the labour market, to increase the share of those finalising their studies, and to ease transition to the labour market, but also to facilitate return to studies. The still unsolved issue within the education system for labour market remains the one of permissiveness of the educational path development by open learning routes that would facilitate professional mobility, time savings for completion/improvement education with respect to competencies, and saving financial resources for education.

Figure 2 **Restrictions and opportunities of education for labour market**



5.2. Multi-partnership in education and training for vocational competencies development

The dynamics of technological progress and the interdisciplinarity both increasingly intense and the high dynamics of generating new knowledge and competencies based on learning in a wide sense have stirred an increased interest for redefining and development of key-competencies in business, science, technology and applied research, in the cooperation between public institutions and the private environment (Bleiklie and Kogan 2007; Laredo 2007). At the same time is redefined also the role of the generating institutions and/or benefitting from the knowledge and competencies – the role of the school, of the business environment, of the civil society, as well as the cooperation forms – partnership in promoting education under all its forms and certification/recognition of competencies. Knowledge and sets of knowledge no longer represent the monopoly of few educational institutions but turn more and more the outcome of interdisciplinary approaches with respect to issues within some networks very often generated by professional informal interactions (Gibbons and others 1994; Gibbons 1998). In this context in which **traditional education institutions become co-partners in promoting continuing learning, the reform of the educational system meaning the creation of a permissive environment for flexibility, adaptability, and continuous reform under the conditions of generating and incorporating innovativeness turns into a necessity, a priority, a condition of current and future certification of the quality of learning. The responsibility of learning efficiency pertains to all forms of education, with respect to rendering compatible the outcome of learning (knowledge, competencies, skills) with the demand of the labour market under the conditions of promoting equity¹¹⁶, access¹¹⁷, quality and financing.**

Quality in education is increasingly more a dependent variable of actuality and efficiency, meaning that it assumes, among others: a curricula adjusted permanently to the requirements of the labour market, and in accordance with the economic-social and cultural (fields of science, knowledge, competencies, etc.) development trends; optimum periods of the learning periods correlated with the need and volume of theoretical knowledge and practical aptitudes/skills; promoting learning abilities and

¹¹⁶ Equity considers ensuring education for all socio-economic categories of population at all levels, including higher-education.

¹¹⁷ Access refers to ensuring the equality of changes on enrolment in one education form, without discrimination on various criteria.

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self-learning to the detriment of gross accumulation of knowledge, gaining practical skills, useful on the labour market.

Financing presupposes the mix of sources (public, private, personal etc. and establishing the costs per beneficiary, depending on the specifics of learning and resource needs (material and human). The total allocations for education are difficult to determine because during the transition period more and more young individuals opt for continuing studies – university studies at one or more faculties, masters, doctor, post-university, and the number of “tax” places exceeds in many higher education institutions the one financed by the state budget. Even though the cost of education increased permanently, we cannot state that also the quality followed the same dynamic, but to the contrary, the gap between the supply of the education system and the demand on labour market in various fields continued to deepen. Continuing learning, after the initial education system attenuates somewhat the differences between the demand and supply on labour market with respect to labour contents – knowledge, competencies, skills, yet this segment of learning addresses mainly the current needs and only to a small extent future ones, the availability of learning for benefits on medium- and long-term being adjusted in the case of youths by the lack of financing resources for education and the stringent need of earning incomes from labour for ensuring daily living support. As contrary to other countries, the part-time work system for full-time students is less developed (despite the increase in the last years), partially also due to some factors such as: tradition of living with the parents during schooling, the difficulty of finding houses and afford the maintenance costs from part-time jobs during the years of studying, particularly in the large towns of Romania, the weak supply of the business environment of flexible-time jobs, the absence of fiscal incentives for the employment of young graduates, or of those integrated in one secondary/tertiary education form, etc. The analysis of the structure of households’ expenditures indicate an increased concern of families for expenditures allotted to education – gratuity of compulsory education presupposes completion costs (special handbooks, collections of problems, tuition hours, common and special requisites, PC and office accessories, etc.) and these costs increase while progressing in secondary and thereafter tertiary education.

Closing the gap between the supply of the educational system and the demand on labour market increases the role of vocational, technical-applicative education, changes the profile and structure of the knowledge, competencies and skills demand. Issuance of qualification certificates within secondary education and, recently, also in tertiary

education the granting of competencies' certificates represent a clear orientation towards the requirements of the labour market, yet the **actual content of training very often is much less adequate to the qualification and/or competencies requirements of the market.**

School remains, in many respects, behind the needs on the labour market, and the quasi-total absence of cooperation during the educational process between school and the business environment significant generates additional costs and extra time for the practical component of learning, born by the individual and/or employers. Hence also the reluctance towards recruiting young graduates who have knowledge but much fewer work competencies/skills and who did not learn how to put to good use the accumulated knowledge. School, meaning the traditional one, during compulsory education remains still far from career and life, and young graduates enter on the labour market unprepared, with career and income expectations that during the first years of active life are provided only as an exception.

In the attempt of developing the knowledge-based society, vocational training and post-secondary technical education, next to higher education have a particular importance. It should be mentioned, still, that a performance and quality generating reform between these components/educational stages presupposes also **changes of substance in the contents of the compulsory education curricula.** Gaining, already in this stage, the literacy and arithmetical skills should be completed with practical skills of managing within the modern society, of making use of the ITC products/services', of communicating, participating, according to age and possibilities to the life of the community.

Innovation, either technological or non-technological, absorbed by the economic and social environment presupposes practical knowledge and skills that should be assured by the educational system. Post-secondary technical education may answer to the competencies needs for using technologies and methods of activity's organisation, and the university one to generating new knowledge and scientific progress. Increasing the sophistication degree of technologies generated the need of highly qualified technicians that interpose between highly-skilled workers and diploma engineers, the training profile and curricular area of whom are closer to the practical needs of economic agents (Mazeran and others 2007). This is what in our system is represented by vocational and upper-secondary education.

The growing importance of competitiveness in the current century and the acknowledgement of the comparative advantages from using on labour market a qualified personnel, associated with the economic-social

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reform from the transition countries and not only, increased the interest of youths for education. After the “dual” German model of education for labour market of the 19th century¹¹⁸ and the one of the Asian tigers who associated the economic growth strategy with the encouragement of technological education by both public and private education system¹¹⁹, nowadays globalisation and trade liberalisation generate the need of competitive and flexible companies with highly-skilled personnel. **Thus, the interest for exact sciences, for cutting edge research and non-invasive, low carbon technologies increased.**

Even though the cost of education increases, it remains the most efficient and viable solution on medium- and long-term for diminishing/preventing poverty and for promoting social inclusion. Additionally, as compared with school education (either public or private), CVT courses provided by the company are more efficient. Irrespective of the chosen education form, more efficient is the one addressing the employment needs of the employers and answer to a larger extent to the job content of the newly created workplaces.

A permanently debated issue remains the controversy **specialisation versus general education** in upper-secondary and tertiary education. On one hand strong specialisation and diversification require costly teaching support but provide for well-defined competencies which, if answering to the labour market demand, prove to be cost-saving. On the other hand, wider specialisation but associated with innovativeness, flexibility and participation might diminish the reply speed of the company to the dynamics of the goods and services market.

¹¹⁸ In fact, it is about a combination between the English liberal model (where the content of technological education was negotiated between the employer, trade unions and provider of training and which answered mainly to market needs) and the centralised French model (according to which the organisation of the learning process and the contents of training was established by the government after consultations with the employers’ organisation and trade unions and was financially supported by companies through a specific taxation system). The German model considered the stability of the training contents, jointly agreed on by government, employers’ organisations and trade unions, the courses presupposing both theoretical and practical training (Mazeran and others 2007).

¹¹⁹ The role of the government in this case was to establish rules regarding the quality of education and gaining through courses well-defined competencies, in fact emphasis was laid on specialisation for supporting the development of a particular field (steel production or shipbuilding, for instance). Through this education system was ensured the necessary skilled personnel of the economy, without creating pressure for superior education forms (UNESCO 2005).

If the **partnership** in promoting education seems to be currently the way towards competitive advantages on the market associated with performance and remunerative employment (financially and also opportunity for career development), it should also be apparent in defining the educational act (here it is also associated with RDI and turning into the triad education-research-production) and in the expected finalities (key and specific knowledge and competencies), as well as under the aspect of financing (state, business environment, civil society, individual co-participation). In fact, **the investment in education might generate/maintain/develop competitive advantages and, under situations of crisis, supports change and economic turnaround.**

As different from pre-university education which is focused on labour market competencies and knowledge for opportunities' creation for access to a superior performance education level, tertiary education related to the requirements of the labour market presupposes: a) strategic and relevant orientation of the curricula on fields of science; b) responsibility in defining the contents of learning for compatibility with the requirements of labour market on medium- and long-term; c) efficient financing oriented on the learning outcomes' quality; d) RDI promotion and cooperation in knowledge development: interdisciplinarity, networks, partnership, complementariness.

Higher education the more remote according to outcomes and educational profile from the requirements of the national labour market, the more shall generate graduates that will migrate on other markets – brain drain – or who will undergo vocational reorientation. ***The strategic orientation of tertiary education assures the need of knowledge and competencies for facilitating the absorption of high-tech and development of new fields of knowledge.*** The systemic approach of policies in the field of tertiary education represents perhaps the most adequate way on one hand for answering the challenges generated by the intensive need of knowledge for maintaining economic competitiveness and on the other hand for it may constitute an active and increasingly significant component of the national innovation system. The knowledge gained through education are heightened by the participation of students, masters and doctor students to RDI activities within the institutional framework or on the research networks in cooperation with research institutes and the business environment. The young individuals gather top knowledge and in their turn generate knowledge and applicability in the economic, social or cultural environment determining the need for new skills and competencies on the labour market for the newly created workplaces by applying the RDI outcomes.

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The development of human resources and training of human capital represent factors of growth for the competitive advantages, and the strategic approach of higher education means at least: a) curricula development on the principle of anticipating/generating future needs of work knowledge and competencies; b) involvement in determining the education needs of all stakeholders, including the private environment and civil society; c) ensuring transparency and promoting accountability¹²⁰; d) performance management and quality control, including by labour market indicators – employment, incomes, performance through quantifiable outcomes, career development dynamics; e) increasing answer/flexibility capacity and speed to the changed circumstances and to innovative initiatives for valuing the development opportunities, etc. In this manner, **a better correlation is ensured between education, labour market policies, productivity and competitiveness on the goods and services market. The graduates integrated on the labour market have the capacity to promote technologically intensive activities that create significantly higher value added.**

5.3. Stakeholders in the system of education for the labour market

The market stakeholders involved in the education system for labour market include: educational institutions, market operators for continuing training, employers, beneficiaries, etc.

The labour market needs labour force with an adequate knowledge package for each field of science and with competencies and skills for valuing the aforementioned, respectively key, common and specific competencies (in the case of highly-skilled personnel)¹²¹. These are required for understanding and using technologies and non-technological procedures,

¹²⁰ Accountability is a relatively recent concept, developed at the brink between the millennia which includes a mix of market ideology, democracy and increasing competition for public resources. In the field of education is appreciated according to the relevance with respect to the needs of the society and of the individual/graduate. As mechanisms of accountability in education we may remind: certification, academic audit, quality evaluation, accreditation, verification tests and examinations.

¹²¹ The quality in education is defined broadly through the **relevance of the competencies' profile of the graduates on labour market**. The knowledge and competencies might be gained both in the formal, informal, and non-formal system and, as a rule, are certified and acknowledged through evaluation processes – exams and tests/final practical applications after graduating courses, or through evaluation/certification procedures of the empowered institutions.

for working under conditions of respecting and developing modern industrial relations. Even in the case of unskilled workers, the required competencies on the labour market change and improve constantly and pertain both to initial compulsory education (competencies of reading, writing and communicating) and specific to the knowledge-society (the use of ITC services, teamwork, etc.).

The main stakeholders in education for active life within the current national system are:

a) **public and private education institutions** which provide both initial education and continuing vocational training. Education for labour market is not only the responsibility of the secondary and tertiary education system through all its forms. Compulsory education is a first step in gaining knowledge, competencies and skills – as rule basic ones which represent the support for ensuring accessibility to the superior cycles of education which train and prepare the graduate for a trade/career. The predominant beneficiaries of the system are the young individuals, before entering on the labour market or, if we consider the continuation of studies, the graduates who are integrated on the labour market and who continue training in parallel. Obtained diplomas and certificates are recognised by the Ministry of Education and, depending on the field, they may also enjoy international recognition at EU level and not only through the existing mechanisms of recognition/equivalence.

b) **market providers of CVT**, who train/improve the labour force for employment. The youths using this form of training for completing knowledge and particularly required competencies for employment. The training profile is preponderantly practical and assures improvement/specialisation on narrow fields. The diplomas are recognised with the Ministry of Labour and allow employment on an adequate job in Romania (and not only, if mutual recognition agreements are concluded for qualifications' and competencies');

c) **employers**, who through training on the job or external courses provided by the accredited training suppliers on the market ensure targeted training on certain competencies and particularised to the specifics of the company's activity. As a rule, this type of training is recognised only at company level or at the level of a group or companies or employers' associations. If the training was realised in a multinational company, then the recognition of training might be wider, respectively within the entire international network of entities depending on the mother-company – multinational companies, commercial chains, etc.;

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d) **certification institutions of the gained competencies within the informal and non-formal system.** In Romania, the knowledge and competencies gained in this manner are not recognised but to the extent in which the beneficiaries require their certification in the more than 42 vocational competencies evaluation centres existing at present. In the period 2004-2007, the 42 existing evaluation centres for competencies gained in non-formal and informal system have issued a number of 6050 certificates.

The certification system allows and assures a relative standardisation and saves time and resources, avoiding the attendance of some courses for knowledge/competencies already obtained by the respective persons. Some of the experts consider that this certification system pushes towards uniformity and affects diversity (Fried, Glass, and Baumgartl 2007). Other experts appreciate it as a form of accepting diversity and a step towards achieving a coherent system of lifelong learning, which is open and flexible, adjusted to present conditions when e-learning and e-work turn into usual forms of training/employment and answer to the internationalization trends of the markets and to the free movement of labour force.

Articulating the lifelong learning system is made through procedures and passage mechanisms between education forms (bridges and ladders) which allow for horizontal mobility (both within training programmes of the same institution, but also between various institutions at the same training level), and vertically between the formal and informal or the non-formal system. Transferable credits solve both the difficulties of equivalence of training, but also make the link with the evaluation requirements of the personnel on labour market and the career advancement/development system, which has as basis a linking algorithm of performances on the workplace to the educational stock of each employed person. Thereby is created, including for the young individuals the opportunity of continuing training (second chance) by making use of other training institutions than the ones initially graduated or at the same ones but after a training break, caused by forced disruptions of the educational path, or by a wrong decision in building up a career and active life.

Training institutions, irrespective of their organisation or ownership form act on the education market in complementariness, but also in competition with the other training providers. Performance and quality of training providers is defined both by quantitative indicators – number of courses, number of graduates, share of graduates (re)employed after courses finalisation, etc. – and by qualitative ones: answer degree to market requirements, market orientation and demand responsiveness, the dynamic of curricula replacement, the reform of the learning methods, the capacity to

develop for the course participants soft skills deemed necessary to be productive in today's world. Moreover, reaching the performance standards defined at national/international level for graduates represents a performance indicator on the market for the training provider.

The knowledge and competencies generated by the education system can be more or less adequate to the requirements of the labour market, costly and hardly accessible to the future beneficiaries, or not. These two aspects represent, in fact, also the main risks within the education system for labour market, particularly for youths depending on the incomes of households they live in.

Partnership for learning oriented on the labour market requirements takes several forms, among which the most relevant for the topic of the present study are:

- *partnership school/training supplier– business environment–research*. Competitiveness in the current stage has two significant pillars for the education system that is knowledge and the capacity of using them in practice. The cooperation of companies with the educational institutions allows not only for mutual support for the training of a labour force adjusted to future needs of employment within the business environment (practical training), but also supports and sustains the RDI activity at company level (which might be a natural continuation of research within education institutions or within the research projects developed through the research networks);
- *partnership between graduate and potential employer*, a case in which the financial support and practical training within company facilitates not only learning as process but also allows immediate employment and better valuing of gained knowledge and competencies (training is plied on the particular needs of the employer, which implicitly generates increased value added at the level of the workplace, immediately after graduation and employment).

In Romania both forms of partnership are much too weakly developed as compared with the needs, particularly at the level of secondary education. The permanent reform state of the education system and the high volatility of the business environment associated with the insufficiency of the available financial resources and the lack of support financial instruments *have hindered the development of a coherent and performance system of training youth and graduates for the labour market.*

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As a whole, the current national system has significant losses which include: parallel financial costs and very often oversized in relationship to the expected outcomes and value added generated in the business environment; de-structuring of the labour market, internal but especially external mobility of the national labour market with the loss/failure to put to good use the public investment in the education of young graduates; additional costs for adjustment to the requirements of the labour market (insertion unemployment associated with vocational training); discouragement at individual level of the young graduates about their employment chances and career development; an ambiguous perspective on the evolution of future demand on the labour market with negative impact on the development directions of education, but also on the vocational orientation of youths, particularly after graduating compulsory education.

In principle, initial education is defined as the main contributor to training graduates' generations and preparing them for the labour market, yet the reality contradicts often and, in some fields, systematically, these expectations. The subsequent partnership for adjustment to the labour market solve imbalances between demand and supply of labour force only partially and on short-term, the need of knowledge and competencies generated by the dynamic of creating new jobs is only to a small extent coupled with the supply of knowledge within the educational system, being necessary more rounds of updating/completion by the CVT system and the second chance in education on different vocational paths.

Box 13. Partnership for permanent education and adjustment to the labour market requirements

The involvement of *social partners* in the process of competitiveness increase and adaptability of enterprises and of labour force aimed to strengthen the social partnership, by supporting the activities of existing sectorial committees and organising sub-committees under the coordination of NCCVT. In 2007 there were established 21 **sectorial committees** from the total of the 23 economic sectors, and within four sectorial committees were established under-committees: SC Health, Hygiene, Social Services – 2 sub-committees, SC Administration and Public Services – 3 sub-committees, SC Information Technology, Communication, Post – 3 sub-committees, SC Education and Vocational Training, Research-Development and Sport – 4 sub-committees.

Yet, for now, the fragmentation of the continuing vocational training supply, the inconsistent geographical coverage with training providers for adults, the low interest of entrepreneurs/enterprises for the investment in human resources

development have contributed to a very low participation share¹²². The national qualifications' framework was constituted with the purpose of realising in Romania a coherent national system of vocational qualifications' applicable for initial vocational training, and in the continuing vocational training as well. Within the PHARE 2004-2006 Programme, 19 sectorial committees from the 23 were involved in the development and validation of 271 occupational standards as result of the vocational training of over 180 experts.

Source: Integrated Strategy of Human Resources Development in view of lifelong learning, 2009-2020, document developed within the project: PHARE PROJECT RO 2006/018-147.04.05.01.07.02. Technical Assistance for Romania in view of supporting the Management Authority for the Sectorial Operational Programme Human Resources Development (SOPHRD) within the Ministry of Labour, Family and Equality of Chances in developing an integrated strategy of human resources development.

The market develops much faster than the education system. The deepening of the labour force deficit on the market and, why not, the lacks of the education system meaning that it does not take into account the realities of the labour market and its trends, might lead in the future to a **net superior crisis to the existing already on the labour market**. New professions emerge at international level as new industries develop, for which also in Romania might exist demand due to the new investors decided to set up their operations' centre and, as a rule, there are no forecasts therefore, and the youths and graduates do not dispose of competencies in the respective fields, the system being unable to anticipate and adjust accordingly the contents of learning.

5.4. Adjusting the education system to answer to the challenges generated by the economic and financial crisis. Opportunities and risks

The current economic and financial crisis generated important reorientations with respect to the priorities of future development. The implications of the crisis are the more important as, at a GDP growth of over 7% in 2008 (the most dynamic economy within EU) in 2009 we are faced with a contraction of about 8% (the most severe in the EU member countries). To this are added the restrictions related to the budgetary deficit

¹²² Established based on the Tripartite National Agreement on the National Qualifications' Framework, signed in February 2005. The 23 sectors of activity for which committees were constituted (based on the agreement of the representative social partners at national level) and which covers the entire economic spectrum were established by the NCCVT which fulfils, by law, also the role of National Authority on Qualifications.

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and the need of diminishing the current expenditures of the state, thus, implicitly the ones related to the public financing of education.

5.4.1. Starting from the idea that any crisis represents an incentive factor of progress, **the investment in education remains a viable solution for exiting the crisis and sustaining the turnaround and subsequent growth.** The experts defined as solutions for economic turnaround “the need to promote goods, services and activities that are based on ecologic sources of energy, the use of RDI outcomes for new fields of activity, new products and services”. In this manner is (re)defined the demand for education, respectively new jobs are created based on new knowledge, competencies and skills, adequate to the aforementioned changes. To this end, the orientation on medium- and long-term might consider:

- increasing investment in education and RDI, which means an **increased role of youths on the labour market, particularly in the new activities/fields;**
- promoting flexicurity as way of maintaining jobs, with the mention that **continuing vocational training/upgrading of knowledge as support for increased performance remains the source of maintaining the workplace and career advancement;**
- supporting the business environment, especially the SMEs by increasing domestic demand. Involvement of the government by supporting public investments in the infrastructure presupposes the **creation of new jobs, hence a higher capacity of absorbing the new graduates by the business environment.** The short term demand is targeted and, depending on the supported fields and/or investment profile generates a certain structure of the labour market demand on medium- and long-term, demand which the education system should consider. In this context **the chances of youths’ employment increase, as they show higher openness towards promoting novelty, better skills and availability for assimilating new knowledge and gaining adequate competencies;**
- the development of partnership in promoting education, the **closeness of school to business environment,** the cooperation for training and applicative research; the support, development, and rendering efficient of vocational and technical education and the change of higher-education in a factor of competitiveness for businesses.

5.4.2. *State responsibility.* Recent studies have proved that if during the periods of prosperity the more flexible institutions are at an advantage, during periods of turbulence, or crisis, centralised systems are more resilient to shocks, due to the protection provided by the state institutions¹²³. Institutions with a high level of autonomy have this sensitiveness in which the decline is more brisk during the periods of economic crisis. But, also in the case of organisation systems based on wide decentralisation, during difficult periods the state has increased responsibilities for sustaining national education, as public good and fundamental constitutional right of the citizens. The current crisis, through its financial restrictions, of mobility and compatibility with the demand of the labour market influences significantly **universities' performances**, generating numerous challenges and opportunities:

- the state-budget is under considerable pressure and shall **limit public expenditures for education**. Financing, the quality of the educational environment and the economic local link also with unemployment shall exercise pressures on universities;
- the connection with the real economy and with the practice bases is affected and promoting some incentives for the development of the educational infrastructure could attenuate the effects of limiting private funds for education;
- Universities have the responsibilities to examine how they may help society as a whole in order to face the challenges of the crisis and to support the state and the business environment with adequate studies and anti-crisis programme proposals.

5.4.3. *Youth suffer most because of the current crisis*, the reason being the one about the level of minimum wages in the context of the policies of the welfare-type state. Youths are either poor and/or inadequately trained from the vocational viewpoint, or they have no practical experience, or they are not accordingly counselled and in accordance with the economic-social development policy, either employment and wage, and the

¹²³ Panaretos (2009) a proved in a study realised in universities from Greece the following aspects: there was no question of increasing expenditures for students, because state higher-education is charge free; there are no issues related to students' enrolment; the decrease of the number of foreign students; the diminishment of the number of infrastructure projects; the diminishment of the number of retirements of teaching staff (in Greece the retirement age is of 67 years); the decrease of demand in the private field; the competition between faculties does not exist, because wages are rather uniform and based on position and length of service; the selection of study disciplines provides for a certain stability; far-education.

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productivity ones policies¹²⁴ are not properly understood and applied. As result, they shall be the first to be laid off. In addition, the new contingents of graduates shall expect a longer period the vocational insertion, and the demand of the market shall be diminished due to the contraction of economic activity, and the economic turnaround, based on the development of new workplaces more adequate for young individuals is delayed by the incapacity of the economic environment to refocus on fields in demand. Imbalances on the trained labour market impose support policies of youths' performances based on a plus of adaptability, reconversion, diminishment of vocational training courses period for the graduates of higher education in the case of changing qualification, increased vocational flexibility and mobility and last, but not least, a more clear answer from the universities that should revise their plans and curriculum in the sense of better modularity and orientation towards practice within real economy.

Still, by exception, despite the economic crisis, the labour force from Romania is in demand on external markets in trades within fields such as: agriculture, telecommunications, electronics and electro-mechanics. Thus, in the first half of the year 2009, there were provided for Romanians approximately 1800 jobs which represent an increase by 56% of the supply from the year 2008¹²⁵. The free movement of persons lead to increased chances of employment in another country, the single barrier being the one related to not knowing an international language.

5.4.4. The need of education targeted on the demand of the labour market and the economic-social development priorities imposes the **optimum structuring of the schooling number on fields and disciplines and of the education content**, particularly for vocational education, upper-secondary and tertiary education (for initial education and continuing

¹²⁴ In an IMF study from 2008, with respect to the influence of the state in private wage policy is shown that the high number of university diplomas in Romania, under the conditions in which the demand on the private market is not as important is related to the fact that the graduates want a safe and well-paid job with the state. According to statistical data, Romania is the country with the highest percentage of state employees with higher-education in total state employees, and the number of employees with higher-education within the public sector is higher than the one in the private sector. Romania records also the largest gap between wages and labour productivity in the region, and the highest level of trade union participation (indicator calculated as relation between the number of trade-union members and total employees).

¹²⁵ See also the article *Demand and Supply on Community Labour Market*, Labour Market from 24 July 2009 http://www.sfin.ro/articol_16814/cerere_si_oferta_pe_piata_muncii_comunitare.html

education). The focusing of education on the needs of the labour market presupposes the **clear definition of the expected finalities, respectively detailed knowledge of demand – knowledge, competencies, skills and aptitudes for the main professions and specialisations**. This does not mean falling into the trap of narrow specialisation, because the school curricula includes, depending on the education level and profile and its type – initial education or CVT also broader disciplines, which allow flexibility and interdisciplinarity. What is important for the less developed countries or with more limited public financial resources for education, is establishing the **priorities and phasing of the education and training needs**, as well as corresponding substantiation of the schooling numbers, at least for the state financed places. The schooling number financed from public funds might also constitute a parameter of sizing the contingents of pupils/students from the public system and the private paid system, but without it being a rule, especially when the promoted educational policy of the public system is not plied on the current and future need of the national economic environment. Still, there might be also the variant of negotiating the schooling numbers between the public and private system, when the need of graduates exceeds by far the financial power of the public system.

Box 14. Strategies on medium-term might define the vocational needs and profile of the labour force in states with limited/insufficient financial resources for the development needs of the education system

The strategic approach of human resources' development through the prism of education for the labour market presupposes choosing a limited number of priorities, respectively those specialisations with an adequate curricular area to the economic development strategies at national level. For instance, in the eighties, Korea opted to focus its efforts for education and vocational training for the labour force in activities such as shipbuilding, equipment and electric machinery, etc. and in specialities such as management. Ireland focused on professions and specialties for the pharmaceutical industry and information technology. Singapore opted for ensuring human resources in the manufacturing of performance medical equipment and services. Brasilia supported the development of knowledge and competencies for the labour force in the aeronautical industry. The purpose was to ensure graduates with training at international standards in well-defined fields so that the country shall become competitive on the international market under the aspect of knowledge and competencies for some economic activities with development potential that would allow for the rapid recovery of the investment in education. The elaboration and implementation of such strategies presupposes the involvement

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of public authorities that define the development objectives/priorities and also of the representative business environment for the priority activities/fields in order to articulate the mix of competencies required for ensuring performance (increased productivity) by selecting performance higher-education institutions in the respective specialties/professions.

Even though similar in the institutional organisational system, higher education institutions may obtain better performance when they promote excellence in some strategic fields/areas as constitutive parts of the national system of education and innovation. A diversified tertiary education system with institutional specialization on fields of sciences and/or specialties may best promote the implementation of national (and individual) objectives of development by the excellence entities in the priority areas.

Source: WB, 2002. Constructing Knowledge Societies: New Challenges for Tertiary Education. Washington, DC: World Bank

5.4.5. Development restrictions of education for labour market:

- the necessity that educational institutions promote **educational programmes permanently updated**, adjusted first of all to internal demand and compatible with the European standards; the development of knowledge-economy presupposes **turning tertiary education into an important factor of economic growth and of promoting RDI outcomes** in the economic and social environment;
- **closer cooperation of vocational education with the business environment** in order to ensure the needs of labour force trained at secondary level, firstly at local and national level;
- the development of **entrepreneurship in education** by maintaining the acknowledged and necessary quality standards for maintain the linking bridges with European and international education;
- promoting some **performance financing schemes**, in partnership, by diversifying the financing sources and the association of **fiscal incentives**; the use of some **adequate methodologies of determining education costs per beneficiary**, on training levels, types and specialties, considering the optimum ratio between theoretical and practical training, institutional performances, etc.;
- **diversity of teaching methods and learning techniques, their adjustment to the particularities of training and categories of beneficiaries**. This implies also the **vocational improvement of**

teaching staff and trainers, but presupposes also the change of the learning culture—interdisciplinary approach instead of exclusively disciplinary approach, learning flexibility, teamwork to the detriment of individual study, practical learning (participation to research projects, internship) in addition to theoretical courses, examination by applicative projects instead of the classic ones, in order to prove the understanding of knowledge and gaining the competences), the use of modern methods of information and data banks, of virtual libraries, etc. (Hagmann and Almekinders 2003; Savery and Duffy 2001; World Bank Institute 2007).

Autonomy, transparency, accountability and competition are elements that may contribute to ensuring the quality of the educational act, and recognition thereof in practice by employment and productivity.

5.4.6. Risks and opportunities during the crisis period. The particularities of the current crisis and the conditions under which it develops, as well as the effects generated by the economic and social environment triggered “preparation” solutions for the exit from recession and re-launching the activity on a qualitatively changed development platform. In order to implement anti-crisis methods, the educational system has as responsibility the training of the labour force in order to be employed in the newly created jobs, and to work efficiently, to be flexible and innovative in decisions, to prove skills of making practical use of the new knowledge, technologies, and work methods and in organising work. **Youths represent the labour force category most adequate for involvement into the new activities based on top technological performances. They are potentially more open to novelty and adjust easier, are inventive and by minimum investments on the job (vocational training associated with the implementation of new technologies and outcomes of RDI) they may generate performance and competitiveness.** Investment in education during the crisis period and preparation for the phase of turnaround by economic restructuring represents a possible alternative to unemployment and discouragement, and a possibility of exiting from the crisis stronger.

Anti-crisis measures of adjusting young graduates to the demand of a changing labour market may consider:

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- using the available financing sources allowing for youth employment for adjustment and swift (re)integration on the labour market – the European Social Fund;
- promoting the creation of new jobs and supporting entrepreneurship by SOP HRD;
- promoting flexicurity, in particular intensifying active policies on labour market for balancing the demand and supply and ensuring social assistance;
- monitoring the impact of the crisis on certain fields of activity by structural adjustments of employment on activities, training levels, etc.

Such measures will generate employment and productivity under the conditions in which the transparency of support measures and accountability for initiated measures shall be promoted. The post-crisis development presupposes the orientation towards knowledge-intensive development under the conditions of meeting the challenges of climatic changes, energy issues, food safety, etc. **The relationship between education and economic growth becomes more nuanced, and is necessary a more intensive national integration and strategic approach with the purpose of building up/promoting a permanent education system that would define and anticipate the role of knowledge and competencies in future growth.** It is about a new approach and a new way of understanding the role of education in the globalised knowledge economy – vital generalised competencies, flexibility, anticipative learning, the development of skills and incorporation of RDI outcomes, including in the learning technology.

Intervention directions for ensuring the compliance with the general principles of promoting lifelong learning, active life and social development¹²⁶:

a) **access to education** without discrimination; open and flexible educational routes, the promotion of training courses for all targeted ages and adjusted to the specifics of learning for each demo-social group; multiplication of the “second chance”-type programmes – with emphasis on the development of basic competencies and professionalization/vocational reconversion; promoting learning in an informal context with respect to the development of basic competencies for all age groups; the development of educational programmes based on an alternative curriculum for the “priority

¹²⁶ General principles: participation and transparency; continuity and coordination; accountability; subsidiarity; good governance and decentralisation; cooperation and coherence; quality; competence; honesty; dignity; flexibility.

education areas”; the development of community centres of learning, including on-line, the support of the business environment for education investments and continuing training of employees (training on the job); the development of support financial instruments for stimulating permanent education; vocational counselling and sustaining learning in all its forms: formal, non-formal and informal, also implicitly certification of competencies and equivalence;

b) **learning for all fields of life:** CVT, learning community centres; cultural operators, “parents’ school” and other forms of involving family in education, strengthening and modernising “popular universities” education by means of mass-media; promoting civic education and for active, democratic citizenship through learning in a formal, non-formal and informal context.

c) development of **specific competencies of the knowledge society and of the competitive economy** – ITC competencies, foreign languages, learning to learn, etc.

Box 15. Online education in Romania

In 2001, the Ministry of Education and Research from Romania initiated a wide programme for supporting the teaching-learning process in pre-university education based on up to date technologies. This programme – Computerised Educational System – belongs to the Romanian education reform and is in accordance with the objectives determined in the action plans eEurope and in the initiative eLearning at European level. The programme could be put into practice by creating a public-private partnership between the Ministry of Education and Research and some other companies: SIVECO Romania, HP and IMB. By SEI is aimed to endow all schools in Romania with complete IT solutions for the teaching/learning process, and the main components are: computation equipment, and communication hardware; computer assisted training; multimedia electronic lessons; teachers’ improvement training and connection to internet.

Source: http://www.euractiv.ro/uniunea-europeana/articles%7CdisplayArticle/articleID_16254/Dosar-eLearning-oricine-oricand-oriunde.html

Such developments presuppose the existence of an institutional support capacity, starting with the public system and promoting the development of lifelong learning through private institutions and social actors in the context of implementing the Lifelong learning Strategy (still

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under development) the integrated strategy of human resources development from the viewpoint of lifelong learning (2009-2020), of the SOP HRD programme 2007-2013-2020, of the national strategy of sustainable development and of the in-depth reform of formal education.

From the viewpoint of the labour market, any reform of the permanent education system must consider: *rebuilding/development of links between school and the business and social environment, and with the community, the support of a flexible education/training network after exiting the initial education system; the development of vocational guidance and counselling systems; the promotion of a curriculum adjusted to the demand on the present and future labour market.*

Chapter 6. CONCLUSIONS AND PROPOSALS FOR A MODERN, FLEXIBLE, INCLUSIVE AND HIGH-PERFORMANCE PERMANENT EDUCATION SYSTEM OPEN TO LABOUR MARKET AND ACTIVE CITIZENSHIP

Education represents a **pillar of the knowledge society** “the only which can bring prosperity, sustainable development and personal development of each citizen”¹²⁷. The major changes that are necessary must start from the definition of **school finality** – respectively **training for performance participation on labour market** and active European citizenship, under the conditions of ensuring the equality of opportunities and non-discrimination.

Romania is a country facing at present major risks, because the systems of education and research do not answer to the minimum requirements of an European economy and society, in which knowledge is the most valuable ware and the most important source of economic-social and personal development¹²⁸. In the new vision of reform, **permanent education is regarded as the basis of the educational system in Romania**. Education represents currently the incentive factor of economic growth by high-quality supply (of competencies and knowledge) of young graduates.

¹²⁷ The strategy “Education and Research for the Knowledge Society” represents a third step in a systematic approach to which the Romanian Presidency committed. On 19 January 2007 was established the Presidential Commission for the Analysis and Development of Policies in the Fields of Education and Research, a commission of experts which presented a report made public on 12 July 2007 and entitled *Romania of Education, Romania of Research* with a diagnosis of the system, as well as with solutions for the identified issues. Based on the Report and on the subsequent public discussions, the **National Pact on Education** was developed, which was signed on 5 March 2008 by the leaders of all parliamentary parties and thereafter by the Romanian Academy and the representatives of another 22 trade unions, students’ unions, parents’ association and other non-governmental organisations interested in the smooth running of education and research in Romania.

¹²⁸ The National Pact on Education completed by the Civil Society, Pact.pdf

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Box 16. Objectives of the strategy “Education and Research for the Knowledge Society”

The final objective of this strategy is real, social assuming of a new values’ scale required for consequent achievement of the options answering to a knowledge-economy. We shall succeed if these values shall be found in our actions, not only in the occasional discourses of today’s potentates.

Based on the realised analyses we affirm that, by sustained effort, up to 2015, we can and should achieve the following **specific objectives**:

1. Placing the performances of the Romanian students in international tests (PISA, PIRLS, TIMSS) in the top of the first 10 countries of the world;
2. Placing at least 3 Romanian universities in the top of the first 500 universities of the world;
3. Increasing 5 times the scientific output and trebling the global innovation index, which would allow us to reach the current EU average for these indicators;
4. Diminishing the early school leaving rate of the educational system under 5% (now it is of 23.6%);
5. Eliminating essential differences between rural and urban education, between the opportunities of learning provided for disadvantaged groups (minority groups, children with special needs, etc.) and those provided for the majority.
6. Changing permanent education into a current social practice at the level of each institution, public or private. Increasing up to 20% the participation rate of adults to permanent education;
7. Changing the teaching staff into a professional elite of the nation;
8. Focusing school on the needs of the beneficiary (pupils/students, employers, community);
9. Allotting at least 7% of GDP for education and research and conditioning the quantum of resources allocated to the entities within the system on the effectively obtained outcomes.

Source: Education_and_research_for_the Knowledge_Society.pdf

6.1. Brief conclusions of general character

The analysis of the lifelong learning sub-systems realised for this study, as well as the inventory of the most relevant aspects related to performance improvement on the labour market of young graduates (realised in the previous chapter) allow us to synthesise some relevant aspects for redefining and redirecting the education reform in Romania, focused on knowledge and competencies with value added for the labour market.

- a) The shift to market economy and changing economy into a dynamic, open one changed the demand profile on labour

market. **The system of national education, particularly the public one answered with delay, partially and relatively inconsistently to the new demand profile on labour market under the aspect of curriculum content and ensuring work skills and practical competencies.** The education system during the period preceding the transition addressed the needs of the labour market, so that school had as main objective the training of the labour force and after graduation each individual had an ensured workplace in accordance with the education and vocational profile obtained during schooling. Currently, the strong and direct link between the education system and the business environment almost vanished – the practice in economic entities and subsequently employment with economic entities which cooperated with the school in pupils' education is found only to a small extent and often only just formally.

- b) The new economic environment requires knowledge, wider flexibility of the labour force, marked adaptability to working conditions and new competencies and skills, or permanently upgraded ones to the absorption of technological and non-technological progress. Labour productivity and innovative involvement at the workplace by assuming responsibilities along with the multiple, multi-dimensional and multidisciplinary approach of tasks' solving become usual requirements of quality at the workplace. Additionally, the use of ITC products and assimilation of key-competencies (assumed at national level, in accordance with the ones of the European Framework) represent the norm and not the exception, including for the jobs requiring a low qualification level. This requirement is in weak resonance with the employment system in Romania.
- c) The private education system proved more flexible, yet insufficiently adjusted to the educational supply of answering to the needs of the labour market. Therefore, many graduates resort to complementary forms of education – CVT courses, in their majority at the workplace during the period of trial employment.
- d) In fact, **the current educational model** from Romania is one undergoing several years of reform, **without finding the algorithm that would promote** both quality and performance in education (for educators and beneficiaries at the same time), but also **closeness/compatibility with the needs of the labour market** and particularly with the ones of the national/local one.

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Just administrative measures, such as shifting to the Bologna Model and de-centralisation of the system cannot lead to those changes of essence that would allow (re)building a permanent bridge of cooperation and mutual influence between education and the business environment, meant to satisfy market needs by an integrative educational supply – in formal, non-formal and informal system.

The lack of adequate investment in education (both with respect to level and financing directions/objectives) leads not only to the deterioration of the physical and didactic infrastructure, but also to the quality diminishment of the human resources active in education. Under-financing of education and the slow rate of revamping in the field triggered consistent investments in pupils' of the families and their orientation after graduation towards workplaces rather remunerative than providing for career development and career build-up, very often in another field than the one of training within the school and on another labour market than the national one. Thus, the public investment in education did not return into the economy, ensuring in fact the free of charge financing of a labour force active on the international market.

- e) **Even though the national labour market created own adjustment mechanisms, of adapting graduates and youths in general to labour market demand** (on the job training, unemployed vocational training courses, fiscal incentives for labour market insertion of graduates, etc.) – **there are still important dysfunctions** (low number of (re)employment after CVT courses, reluctance of employers to recruit young graduates without work experience, low remuneration of the latter at least for the first years after employment, barriers in promotion related to experience, and not to performance, etc.).

6.2. Education for labour market – a priority of permanent education reform?

The adjustment of the education system to the needs on the labour market and increasing the quality of the system presupposes **efforts on the following main directions:**

- a) curricular reform, and of the learning/teaching methods for gaining not only knowledge but also competencies and skills compatible with the labour market demand;

b) the educational route – increasing the capacity of pupils to put to good use their skills and knowledge – learning should include knowledge and competencies from a wide and flexible curricular area that would provide the opportunity of adequately opting for a profession or for the educational route after graduating initial, compulsory education; promoting vocational education adjusted to the needs of the labour market;

c) adequate and efficient financing of the educational system and promoting targeted policies depending on the beneficiaries and needs of the labour market and/or of local development, education being a factor of preventing/diminishing poverty.

The **principles** that should be complied with in practice for ensuring permanent education as an instrument for sustainable individual development and economic performance, for social and cultural progress:

- **equal access to education** for all categories of pupils/students (non-discrimination on access, support during the training period for those lacking enough financial resources);
- development **of a learning culture focused on outcomes**, on individual performance **certified by actual life**;
- ensuring a **common platform of pupils' education**, recognition of qualifications and of diplomas and easing access to recognised handbooks, representative for each field of science, specialisation and education level¹²⁹.

The main challenges for education's system reform might be synthesised in the following:

1. Compatibility, **establishing connections with the European systems for quality in education** (quality is contextual and therefore must be regarded from the perspective of assuring the expected outcomes, that is particularised depending on the assumed objectives). In the case of Romania, we need an education system adjusted to the open market economy, based on the values of sustainable development and supporting career development.

¹²⁹ A new approach about handbooks. Pupils might access free of charge or only for a fraction of the cost handbooks, printed copies, in audio version and available for download on the net. The handbooks are not only free of charge but they can be adjusted/changed, if necessary. This has a great importance in other countries, if the adjustment and/or the translation of the text is intended. Flat World Knowledge promotes this books together with a learning platform that would allow the pupils to learn one from the other and from books. (Source: <http://www.america.gov/st/webchat-english/2009/September/20090908162635ihecuor5.096942e-02.html>)

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2. Social inclusion and promoting equality of chances, as mechanisms of diminishing/preventing poverty.

3. Financing focused on beneficiary and benefits expected from education.

4. Efficiency in resources' allocation.

5. Management and accountability – transparent standards, performance focused management, stakeholders' accountability.

6 Public-private partnerships in education and school openness towards the business environment.

Education reform is nowadays at a new crossroads. In the last years the concerns regarding promotion of education in a broad meaning became more marked, as for the reform of each of the subsystems¹³⁰, and the realisation of some integrating strategies of human resources¹³¹ for sustainable development. In September 2009, the Government assumed the responsibility in Parliament for the education's law aiming a turn within the Romanian system from formalism and quantity to quality, flexibility and performance. It was an important stage in changing education to a support factor of economic and social development, yet not substantiated enough for the in-depth change of the system.

The change of learning culture, the creation of a new lifelong learning culture, leaving behind past mentalities and openness towards the business, social and cultural environment represent only some of the “basic needs” of implementing and rendering operational the new system.

Romania experimented frequent legal changes, additions, developments, etc. but without following-up the effects of implementation – direct and indirect ones, on short-, medium- and long-term. Only the “legislative adjustments” of the last years have deeply perturbed the pre-university system and have implemented the Bologna System without a required previous preparation. The generated effects, much less favourable as compared with expectations have speeded up the recent proposals of new changes.

¹³⁰ Valentina VASILE, Gheorghe ZAMAN, Steliana PERT, Felicia ZAROJANU, 2008, *Restructuring the education system in Romania from the viewpoint of developments on the internal market and impact on research progress*, European Institute of Romania, Strategy and Policy Studies, Study no.2.

¹³¹ The first integrated strategy of human resources development from the perspective of lifelong learning 2012-2020 was finalised and the strategy of permanent education is on the way of being finalised.

With respect to **education for labour market** there are necessary a sum of **instruments and policy measures** to support the future construction of Romanian school, that is:

- linking school to economic-social reality, to the society, to the shaping for future generations of an authentic behaviour based on values by a judicious balance between knowledge, skills and aptitudes gained in school¹³²;
- *rendering compatible* the educational cycles with the requirements of a modern education and with the *European Qualifications' Framework*;
- bringing closer the school curricula to the *requirements of the labour market* (knowledge, skills, competencies) by ensuring the theoretical education and the practical one in a complementariness system through the cooperation between the education (formal, informal, non-formal) with the business and social environment;
- *focusing curriculum on the 8 categories of key-competencies*¹³³: communication in mother tongue and in two international foreign languages; fundamental competencies of mathematics, sciences and technology; digital competencies (of using information technology for knowledge and problem solving); axiological competencies or of valuing (required for active and responsible participation to social life); competencies for the management of personal life and career development; entrepreneurial competencies; cultural expression competencies; competencies of lifelong learning;
- the assimilation *during compulsory education* of digital competencies¹³⁴ c which already represent a comparative

¹³² National Pact on Education as completed by the Civil Society.

¹³³ The graduates of compulsory education shall gain these competencies at basic level, and college graduates – at advanced level. Based on these competencies the training profile will be clearly established (= what we want the student to know) for each studies' cycle. For each discipline of the teaching plan, the learning contents shall be organised so as to contribute in a coordinated manner to training aforementioned competencies. The main evaluation and approval criterion of a school handbook shall be related to the extent in which it contributes to training mentioned competencies. An items databank shall be created with a guidance function to assist teachers in grading the class to evaluate competencies, not information.

¹³⁴ European Youths aged between 16 and 24 years are the expert population in using modern multimedia techniques. In accordance with a report published by the European Commission on EU competitiveness in the field of digital telecommunications this category

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- advantage of youths on the labour market to the detriment, sometimes, of work experience of mature/elderly generations;
- development of educational policies within the *co-partnership* system between school, local community, business environment and correlated with the national orientation in the field of education and continuing learning;
 - accrediting *schools as centres of permanent education*;
 - focusing education on the beneficiary and adopting the principle of “financing follows the student”;
 - ensuring mixed public/private *financing systems* and promoting a fiscal system that would stimulate individual and corporate investments in continuing vocational training; promoting some simulative financing systems for the teaching staff, adjusted to the modernisation needs of educational institutions, and sufficient to ensure teaching support required for theoretical classes and for the practical applications;
 - improving the learning act under the aspect of teaching methods and also from the viewpoint of gaining by the students of the ability to use/value knowledge not only their memorisation; a functional report between knowledge accumulation, competencies gaining and basic skills; radical change of the teaching technology;
 - improving human resources in the education system and increasing their efficiency;

shall make the future game rules on the European market. Viviane Reding the European telecommunications' commissioner considers that this generation shall be the new economic power. “More than 70% of the youths make use of the modern Internet data capacities. We called them the digital generation (ed. Note. digital natives), the term including the persons born in this era and who started using the Internet immediately after turning into active consumers on the European markets”, states Reding. Romania takes one of the last positions regarding the penetration rate of broadband internet with 10.7%. Yet it is interesting that Poland, Slovakia and Bulgaria are behind our country with a penetration rate of 9.6%, 9.6%, respectively, 9.5%. The highest degree of broadband internet penetration rate within EU-27 is of 37.4% and is found in Denmark. According to the speaker of the European Commission, Martin Selmayr, the European Union surpasses USA. Yet, on the other hand, the investments in research, and modern multimedia technologies are much smaller than the ones in the USA and Japan (the digital generation shall be the next economic power

D.M. - 05.08.2009, <http://www.baniinostri.ro/IT-C/Generatia-digitala-va-fi-urmatoarea-forta-economica--a1450.html>)

- *evaluating the quality of education in Romania at last based on the European guidelines* (measurable and standardised; implementation guides, that would provide for the involvement of the beneficiaries; adequate resources; mechanisms and procedures of feedback; transparency; an adequate coordination and correlated at European level for ensuring the coherence and systemic analysis capacity; a cooperation process between initial and continuing training, involving the relevant beneficiaries at community, national and European level; community priorities; dissemination of good practice examples;
- stimulating the *return of youths who studied abroad* for employment in public/private fields and institutions that ensure products/services with value added and contribute to increasing competitiveness (“brain regain”).

The need of actual reform, consistent and well anchored to the national needs in the European context was acknowledged and assumed by the civil society which, by the National Pact on Education defines the intended finality of education – sustainable generation of national, highly competitive and trained human resources according to the current and future demand of the labour market.

Box 17. The National Pact on Education as completed by the Civil Society

The strategic objective of changing School as a system is the **sustainable generation of a highly competitive human resource, apt to efficiently function within the present and future society**. The directions of action and the required projects for fulfilling the strategic objective aims the orientation of the educational system towards the needs of its beneficiary, including towards the special needs of the disfavoured ones, the proactive anticipation and satisfaction of current or future needs of the competencies market.

“We have signed together with the political parties from Romania the National Pact on Education. This Pact is a common vision of the main political actors on the objectives that must govern the education system in Romania and is a commitment of the political class towards the society”, stated President Traian Basescu after signing the Pact on Education (March 2008).

Source: pactu.pdf

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6.3. Challenges for the youths' labour market as result of the financial crisis' effects

The financial crisis affected deeply the youths' labour market, but also the permanent education system. The drastic diminishment of consumption, of households' incomes and the diminishment of the remittances' flows have triggered on one hand the diminishment of investments for education and, on the other hand, the profile and dynamic of new jobs' creation. Paradoxically, the **crisis exit** by promoting economic activities that consider energy saving, environmental protection and shift to low carbon technological systems generate new jobs based on adequate knowledge, competencies and skills that **may be gained only by additional training**. Yet, the costs of training is increasingly higher, and the diminishment of incomes due to economic contraction re-orientates the structure of consumption to immediate, material needs of daily living. The financing/crediting systems of permanent learning adequate to the crisis/post-crisis period, practically are **inexistent** in Romania (for companies, particularly for small and medium ones, continuing training is much too costly as compared with the short term advantages it brings along).

A direct effect of the crisis was represented by the increased number of lay-offs that will continue and even become more marked in 2010. The crisis affects unevenly employed population under the aspect of trades/professions, but also from the viewpoint of age. The crisis' impact has as effects the increase of informal employment and growing poverty among employees, and the already existing dysfunctions on labour market will become more distinct. At the same time, the experience of the previous financial crisis has shown the gap and extension of the recovery period on labour market as compared with other markets – the increased long-term unemployment, a higher degree of “informality” of labour market, intensification of the rural-urban migration and poverty (or its expansion) in households' highly depending on labour incomes, the growing pressure on labour market and the noticeable de-structuring on trades/professions as result of the return in the country of migrant workers. All these phenomena extend the labour market crisis, increase the risk and volatility of employment, and diminish the flexibility of labour market to the economic demand.

Experts share the opinion that the crisis' amplitude on the labour market shall be visible by the end of 2009, or later, and the contraction of economic activity could annihilate the effects of employment growth from

the last years. The most important job losses were present in the economic sectors/activities oriented on exports (industries of the metallic manufacturing sector, machine-building, etc.), tourism, etc. and some jobs shift to the informal labour market, in order to avoid additional social costs of wage earnings.

In this context, **youths' employment is much more volatile than for the mature labour force. *The youths' labour market is characterised by an opportunities' deficit of decent employment, the diminishment of jobs, precariousness of employment (the increase of the part-time jobs, of temporary employment) and wage diminishment.*** The youths are also faced with increased difficulties on entering the labour market, considering that during economic expansion there were problems in creating new jobs for them. The lack of employment perspectives in a decent job on entering the labour market affects/compromises the path on labour market. In addition, ***unemployment among youths' presents specific vulnerabilities – increase sensitiveness to economic activity's variations, difficulty in creating new jobs for the youths, longer period of unemployment, easier entry on the informal labour market, which becomes a true refuge, particularly for graduates.*** The estimates of the experts show that an increase of the total unemployment rate by 1 percent is accompanied by a diminishment of employment among youths of about 1.1 – 1.8 percents, and that Romania is among the EU Member States with the highest unemployment rate among youths, and an increase thereof is still expected. The crisis “generates” precarious workplaces for the young, which are poorly remunerated, very often under the level of gained qualifications, hence generating the loss/depreciation of competencies or long-term unemployment along with discouragement, and higher poverty incidence.

The required anti-crisis measures for revitalizing the youths' labour market must start from the reality that any crisis represents an incentive for development, an opportunity for increasing competitiveness by creating new jobs, and allows for putting to good use new knowledge, competencies and skills, which are much more accessible to young individuals than for the re-qualified or under vocational training labour force. In addition, the benefits of a young labour force, well-trained and desiring career confirmation on the labour market and with the business environment are well-known. Increasing the efficient employment opportunities of the youths represents an incentive for a more marked dynamic of economic turnaround, with multiplying effects on long-term.

Possible anti-crisis measures and for stimulating youths' employment consider the following:

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- creating/preserving jobs with flexible working time, associated with part-time jobs;
- promoting entrepreneurship, including by financing schemes for start-ups;
- developing some internal adjustment systems to the workplace of young individuals through short-time training; promoting apprenticeships at the workplace and of the internship for young individuals in view of swift adjustment to the job requirements under the aspect of skills and competencies;
- intensifying active measures aimed to employment/re-employment of youths – counselling, new jobs searching/creation, fiscal facilities for employers.

6.4. A possible integrated model of education for the labour market

An in-depth reform, of essence of the education system with the realisation of a **coherent network of permanent learning based on various institutions and educational forms, presupposes the conjugated effort of the state and of the private environment for supporting the assumed changes.**

The first step is the one of ensuring *the support framework of sustaining the reform at macro level through specific measures and instruments* – stimuli for investment in human capital, including fiscal ones; employment policies targeted on youths and sustaining the elimination of the lack of practical experience (the argument most frequently called upon by the employers on refusing employment) by financing training on the job or practical training with authorised providers. Ensuring the coherence between school curricula for various forms and levels of education, and updating it in accordance with the requirements of the National Qualifications' Framework; increasing the quality of primary and lower-secondary education and assuring the gain of basic competencies for each educational level. The next step should be to assure the knowledge of educational supply and the transparency of the system, in order to avoid wrong changes and subsequent re-orientation, for all forms of education, from the public and private system, by mentioning the possible learning routes. Supporting the informal and non-formal education forms as alternative to classical education, and promoting the modern learning forms – e-learning, short improvement stages, far-education, etc. might lead to an increased flexibility of the possible paths of gaining knowledge and

competencies, and to the association/alternation of learning periods with full-time or part-time system employment on the labour market. Hence, the employment capacity increases, and the business environment might identify candidates with a career profile closer to the needs. The partnership school-business environment in training competencies for the labour market remains the most efficient and flexible way of learning and subsequent employment allows for more rapid integration of the youths on the labour market, practically without insertion unemployment stages

At the same time, the partnership of the school with scientific research allows the development of educational modules that anticipate the future knowledge and competencies of the labour market.

An integrated performance educational model is the one preserving a mobile balance between education for the present and future labour market, in the context of knowing the national economic and social sustainable development strategies

A rather controversial issue in Romania, as in many other countries is represented by the **accountability of the public system in the development of educational systems adjusted strictly to the needs of the labour market vs. The support of education for human development on long-term**. The exclusive orientation on a single direction is not possible, yet by targeted temporary measures one side or the other might be emphasised. It is obvious that education should be promoted in a systemic manner, starting with the acknowledgement of the need of lifelong learning and particularly, during the active life. Considering the current demand for education of the labour market, and the present and long-term restrictions, we consider that any policy in the field, irrespective of the emphases developed on knowledge fields must promote the following aspects:

- mutual support of education by the social actors by developing long-term links and stable partnerships between training providers and economic agents;

- improving the answer/reaction of education providers to the labour market developments as a way of efficiently using the training resources;

- or developing policies for supporting vocational and technical education, and diversification of the financing sources/forms through levers of facilitating payments and/or of recovering costs;

- supporting education/training on the job through incentive policies, promoting support financial instruments and recognition of education's quality;

- supporting informal education for vocational training;

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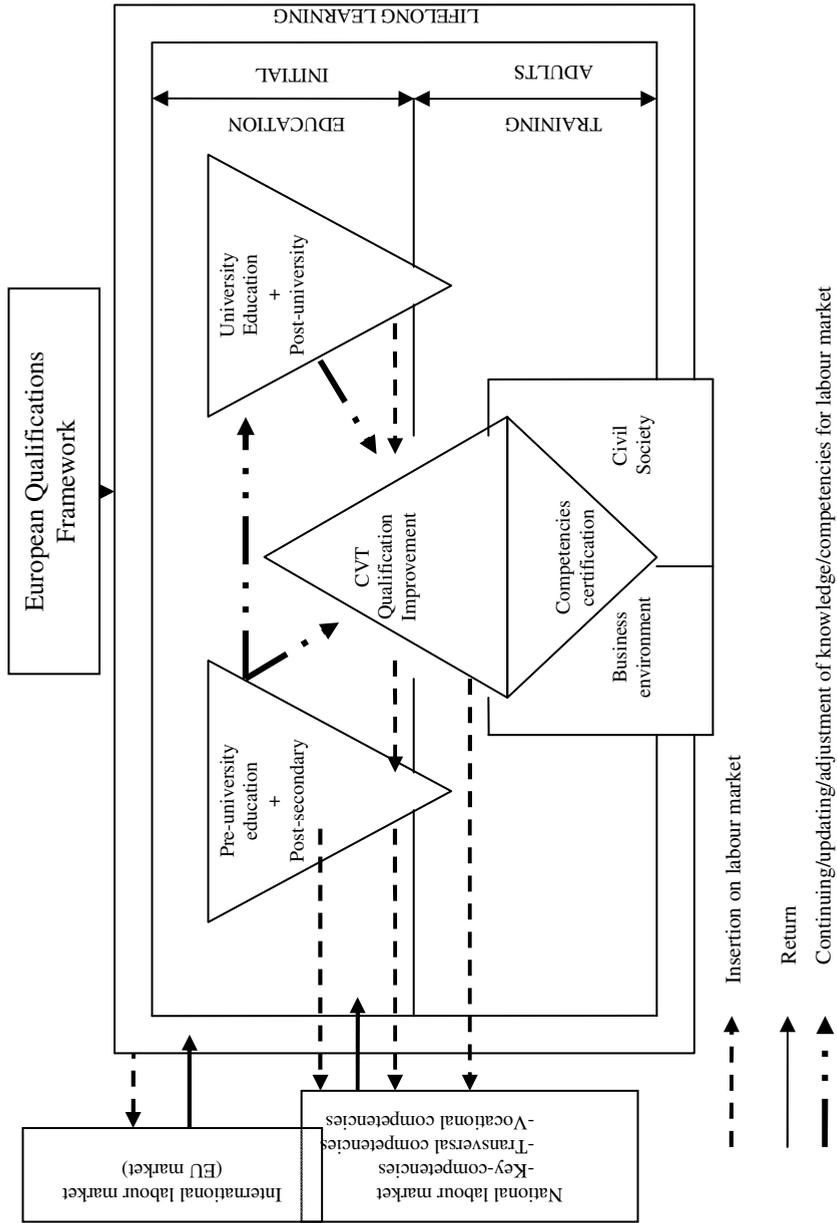
- developing key-competencies recognised on the labour market and promoting entrepreneurial competencies for liberal trades and self-employment, in accordance with the European Qualifications' Framework.

Some competencies that shall be demanded in the future on the labour market may be anticipated, some not. Therefore, **education for labour market is based on four pillars**, respectively:

- *gaining generic competencies within secondary education* as basis of continuing education in its superior forms;
- *promoting increased flexibility in finalising vocational and technical education programmes by strengthening related specialties* with a wide application sphere on activities and fields;
- *orientation of secondary and tertiary education on the estimated demand on professions and trades* and improving the parents' and pupils'/students' information system about the possible options of the educational path;
- *developing in complementariness an adult education system easily accessible for young graduates* for completing education on punctual/specific components (World Bank 2008b).

The scheme of an **integrated education model for the labour market** starts from the need of coherence within the system, of the existence of a permissive legislative and institutional framework, and of inter-correlated policies which are categorised under the two wide coordinates of young individuals' training for the labour market, respectively the Lifelong Learning Strategy (under development) and the National Strategy of Labour Force Employment. The proposed framework allows for rendering efficient the functioning of the existing institutions on each organisational sub-system of education during the entire life span, yet it is necessary to create, and especially to ensure the functionality of some links/channels of information transfer for assuring/facilitating the educational path before or after insertion on the labour market through educational routes open and flexible to the vocational adjustment, (re)orientation depending on the dynamics of labour market demand for knowledge and competencies.

Figure 3. Integrated model of education for the labour market



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A possible scheme of integrated strategy for promoting youths on the labour market and increasing their role in higher competitiveness would include as basic pillars:

i) adjustment of the educational supply to the demand of the labour market; on profiles and specialties, on types of knowledge and key-competencies, etc., in view of facilitating labour market insertion of graduates;

ii) a set of specific indicators for multidimensional definition and characterisation of the youths' issues on labour market – under the aspect of flexicurity, of the youths' lifecycle perspective and of human development, It may be used for substantiating the specific strategies and policies and, particularly for monitoring the efficiency of labour market and social inclusion of the youths;

iii) adequate/particularised youth employment policies on the labour market (increasing employability) by complying with at least three conditions: coordination of monetary, financial and incomes' policies, the reform of the labour market and of the social assistance services' system, increasing individual autonomy and young labour force mobility through permanent investments in continuing training (lifelong learning);

iv) support policies for improving the living conditions of the youths – recent studies highlight the constant deterioration of the living conditions for young individuals;

v) behavioural reform of the youth – diminishing uncertainty and increasing the risk management opportunities – a new culture of active participation to labour market;

vi) periodical analysis/evaluation of the public policies, of failures and promoting best practices.

The applicability of this model shall presuppose and ensure at the same time:

- **developing integrating curricula** on educational fields and routes flexible to market demand (on short-term) and which should incorporate educational models of completing/renewing knowledge and competencies for the future demand of the labour market (medium- and long-term);
- the improvement of the **quality certification systems** of the educational act and achieving coherence of the sub-systems from the viewpoint of exigencies and follow-up indicators;
- **an evaluation system of educational processes** and of calculating the economic and social impact by using an integrated system of

follow-up indicators and the management of a databank that would allow for the highlighting of the dynamics of bringing closer the educational supply to the market demand.

The delay in continuing the reform by integrating and inter-connecting educational programmes in supporting the training of graduates for the labour market due to the crisis, the insufficient resources, etc, will generate the extension of the period of economic decline. The arguments for supporting investment in education and qualitative reform as national priority refer to:

- the recognition by experts of the need of stimulating/promoting the development of niche activities based on green technologies and energy resources savings and associated measures of adjustment in many EU member countries. In this context, training (the completion of knowledge and gaining new competencies) is imposed as necessary factor of absorption and efficient use of RDI outcomes;
- acknowledging the risk of extending the employment crisis due to the economic contraction (re-launching employment is subsequent to economic turnaround at a delay measurable in years)¹³⁵.

Each educational sub-system may develop programmes/models for improving the finality of education, respectively based on gained knowledge and competencies, the graduates can have higher performances on the labour market. The functional link assisting in the passage from one system to another, and then on the labour market should not be omitted, as well as the opportunities of returning for knowledge and/or competencies update during the active life. An example of such a model for improving the performances of graduates is presented by the higher-education (Figure no. 4).

The proposed model is focused on strategic priorities and priority support actions, on the three cycles; the draft took into account the inputs and outputs on the three cycles, under the current conditions, and the performance targets to be obtained for better positioning of the outcome indicators, and increased performances in relationship with EU member countries.

Then provided solutions are flexible, efficient (from the viewpoint of involved resources, but also of the time factor), feasible (immediate applicability, and initial costs are low). Also, our suggested approach is

¹³⁵ ILO 2009, Recovery from the crises. A Global Jobs Pact adopted by The International Labour Conference at its Ninety-eighth Session, Geneva, 19 iunie 2009.

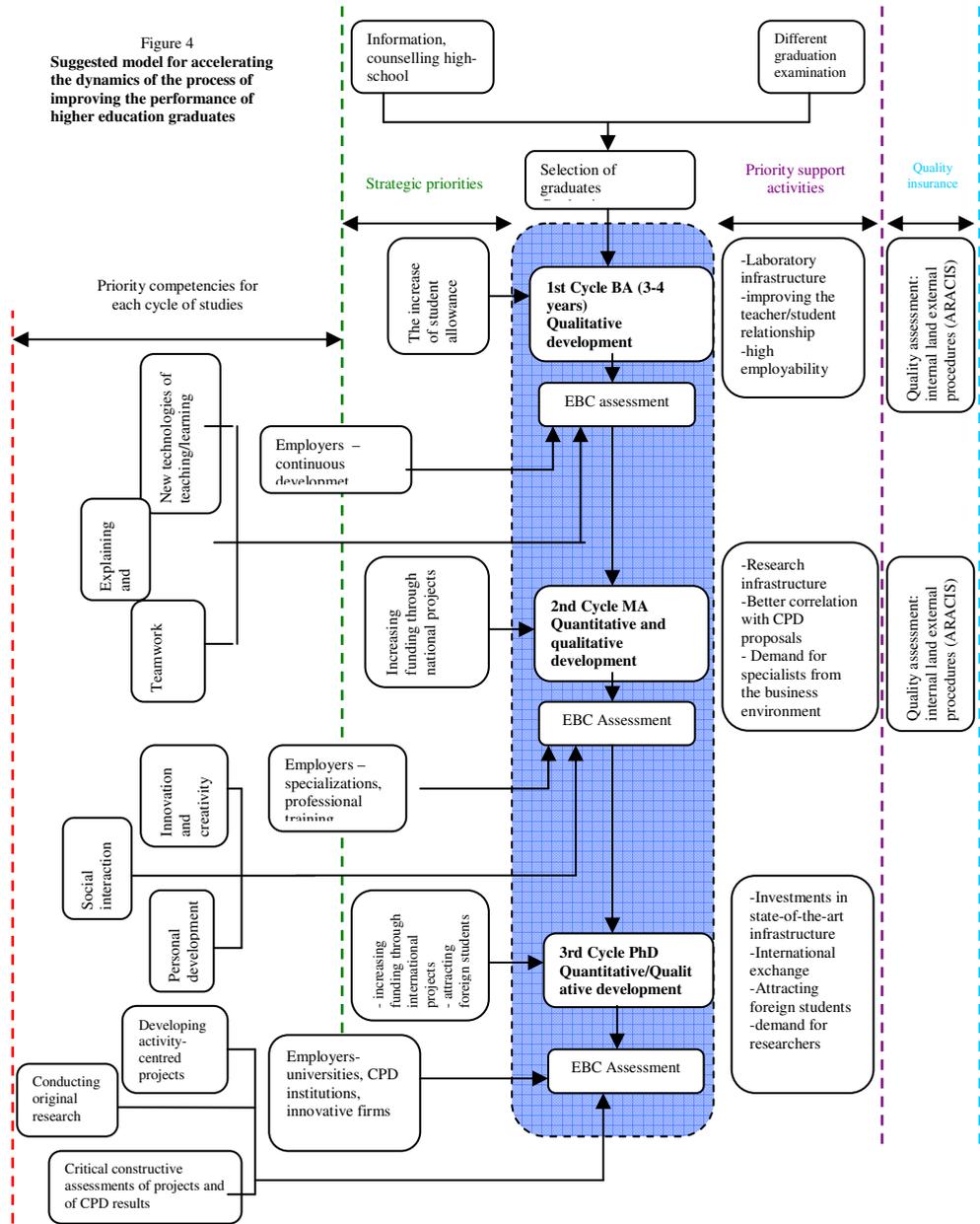
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synergetic, because giving renewed attention to the II cycle (master) solves upstream qualitative issues (first cycle bachelor), creating also a natural, intuitive connection, but efficient downstream (III cycle master).

The different approach regarding the quantitative and qualitative increase considers the preponderantly necessary qualitative increase for the first bachelor cycle, meaning the improvement of the curriculum, of the evaluation/learning manner, the need of vocational training and teachers' specialisation in new learning/teaching/evaluation methodologies and technologies, and a better motivation of the students during the years of studies. The priority for the first bachelor cycle inputs is represented by the pre-university education, the most important link of education in Romania. For the second masters' cycle, the approach is preponderantly quantitative because it is about the arithmetic increase trend of masters' students, a trend that shall be noticed also in the following years, and this fact is completely new for the Romanian educational system. The same type of approach is found also for the third doctors' cycle where the growth trend of the number of doctor students is already visible, but more markedly for the next years, but it is also about a new vision on the quality of these Doctor Schools, newly created in Romania, both at their curriculum and at their management level.

The way of evaluating based on competencies is best fitted in this context, and the employers' feedback might lead to increased quality and taking best decisions for improving, restructuring and reforming, whenever necessary. Moreover, the type of lifelong learning is suggested by the boxes that include the employers. The figure presents also the priority competencies, necessary to be obtained on cycles of study, on the left hand.

Figure 4
Suggested model for accelerating the dynamics of the process of improving the performance of higher education graduates



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6.5. Conclusions and recommendations regarding the improvement of support policies of youths' employment as performance factor and facilitator of technological progress absorption

The current system of promoting renewal on labour market and stimulating performance is inadequate to the challenges of economic and social development and to speeding the catching up process of Romania against the EU performances' average, and not only. **Not only the education system displays severe deficiencies that affect the quality of the learning outcomes, but also the process in itself of graduates' transition to the labour market and of supporting their employment has slow performance, is hindered by obsolete mentalities and behaviours, inadequate to the present, and particularly to the future development of the business environment, and of the labour market relationships,** and to promoting social accountability of companies, social inclusion and to the promotion of the equality of opportunities.

The reforms of the two decades of transition, both on the labour market and on the education market under all its forms – formal, informal, non-formal – represent an incomplete puzzle, without linking pieces/components between markets and educational forms, or sub-systems. For each component it was pursued to improve and adjust it to the EU or international standards assumed rather more formally. The content reforms have weak performance for at least two reasons: a) the lack of preparing change associated with regulations', institutions', instruments', mechanisms' and policies' takeover; b) incoherence and inadequate coupling with the complementary or support systems. Because of these implementation haste and inadequate and/or insufficient substantiation of opportunity, necessity and practical possibilities of assimilating/implementing/adjustment have resulted hybrid systems which are difficult to couple functionally with what existed, or difficult to implement by replacement. **The maturity of assuming responsibilities is still lacking just as the awareness about the complementary role of each component,** on one hand educational for the training/improvement and permanent adjustment of the labour force to the needs of the business and social environment, and on the other hand of accepting and valuing the labour potential of each age category. Lifelong learning is addressed both to youths, graduates becoming again “students” on the market and for the labour market, and mature individuals periodically return to the education system (under all its forms) for accumulating and/or certificating knowledge, competencies, in order to answer or to anticipate the needs

(demand) of the labour market. In fact, it is about, the **cultural model of the 21st century citizen – active and performing during the entire life span, under specific, adequate forms. Still, it should be emphasised the youths’ high potential of performances and mobility/adaptability, a capital still insufficiently put to good use.**

The present study intended to be only a step, yet a necessary one and potentially of maximum utility for qualitative changes of essence, in an integrating vision at national level and within the EU area to the construction/modernisation of which through self-development we committed at the time of accession. Starting from the improvement of initial education systems, of permanent education, of labour market and complementary of the business environment and of the social development it was attempted to outline a coherent network of information implementation flows for mechanisms and activities that would allow a fluent transfer between the education market and the labour market with periodical “completing” returns and corrective feedback of the educational content. The total quality chain for career performance of the labour force is interlinked on the model of the double spiral with education for life and for adequate industrial relations corresponding to the modern knowledge- and performance-based society, and the linking points (of relationship) should ensure balance and flexibility for the entire network.

Within the system of initial education is aimed at a deep reform, of essence, yet the measures promoted in the last years lead rather to a systemic crisis. The year 2010 lists among the Government’s priorities the Education Law, as a framework law intended to create not only coherence, but especially performances. The shift is made to education and competencies’ evaluation, and the school year 2009/2010 is the first step when a new type of baccalaureate is experimented, based on competencies and meant to ensure a transition to labour market closer to the demand’s expectations generated by the business and social environment. A similar system of final evaluation was introduced also in higher-education (the graduation diploma is completed with a qualification certificate), and the courses in the adult training system include also a supplement to the certificate/diploma in which gained competencies are mentioned. **The still open question which is reflected in the (re)employment degree after graduation refers both to the compatibility between the gained competencies by education and those required on the labour market, and to the practical ability of graduates to prove and use at the workplace these competencies.**

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Even if at legislative and institutional level we assist to catching up with respect to the EU practices or recommendations – the Lisbon targets, the Bologna Process, the European Qualifications' Framework – **in the field of support policies and of the instruments/mechanisms of assuring the achievement of the assumed targets, the weak quality of outcomes is noticeable.**

Expectations about the reform/improvement measures of the system:

- **redefining the role of education** in society and particularly of the necessity of lifelong learning as support for economic growth/turnaround and social progress. Education is a basic necessity for ensuring the labour force demand and a factor of triggering technological progress at all individuals' life levels;
- temporal and spatial **coherence and compatibility**, between the knowledge and competencies demand on labour market and the supply of initial education and (gaining and certification) continuing training system graduates, which means education for the labour market and active citizenship, for current and future demand;
- **ensuring open routes of continuing learning**, with competencies' equivalence on the background of developing the National Qualifications' Framework and permanent updating of the education contents;
- **ensuring the total quality chain of lifelong learning and the development of an indicators' system for monitoring the impact of education in economic and social development** (GDP growth, social inclusion, human development);
- **motivating investment in human resources** through levers and facilitating mechanisms of access to education and continuing training, financing and recognition/equivalence of competencies;
- **promoting partnership** for lifelong learning – on ownership forms and on categories of market actors, the development of the intangible capital of the labour market. Currently there is an obvious deficit in public financing but particularly in the private one on key-fields such as higher-education, adult education and continuing vocational training.

The need of *creating a support network* for performance integration of graduates on the labour market presupposes:

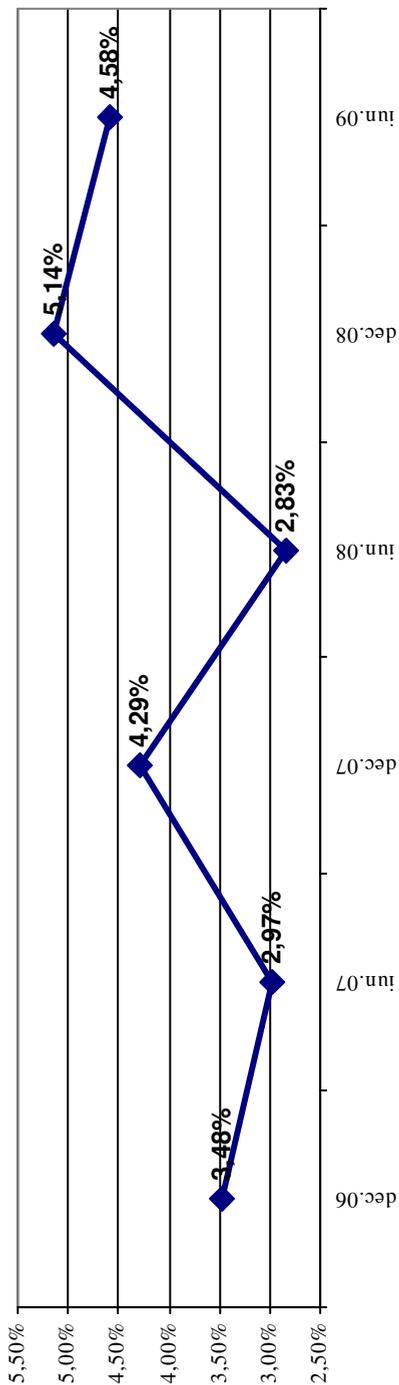
- a) amendments to the legislative and institutional setting, meaning the assurance of the communication and functional channels

- between the education market and the labour market at national/regional/local level and of each of the aforementioned with the similar ones at European and international level by certifying and recognising the quality of the young labour force;
- b) coordinating and monitoring the expected outcomes of learning on the labour market, including by means of an Inter-ministerial Coordination Committee of the Education System for the labour market and active citizenship, and dual coordination – on behalf of the Ministry of Education and the Ministry of Labour with the support of ministries with responsibilities regarding economy's development (at national and regional/local level) and the coordination of financing resources;
 - c) development/improvement of the impact indicators' system that would substantiate the demands of the labour market and the educational supply, and to evaluate the economic and social effects from valuing the potential of graduates;
 - d) the periodical evaluation and current and future curricula and educational methodology adjustment to the demand of knowledge and competencies of the labour market.

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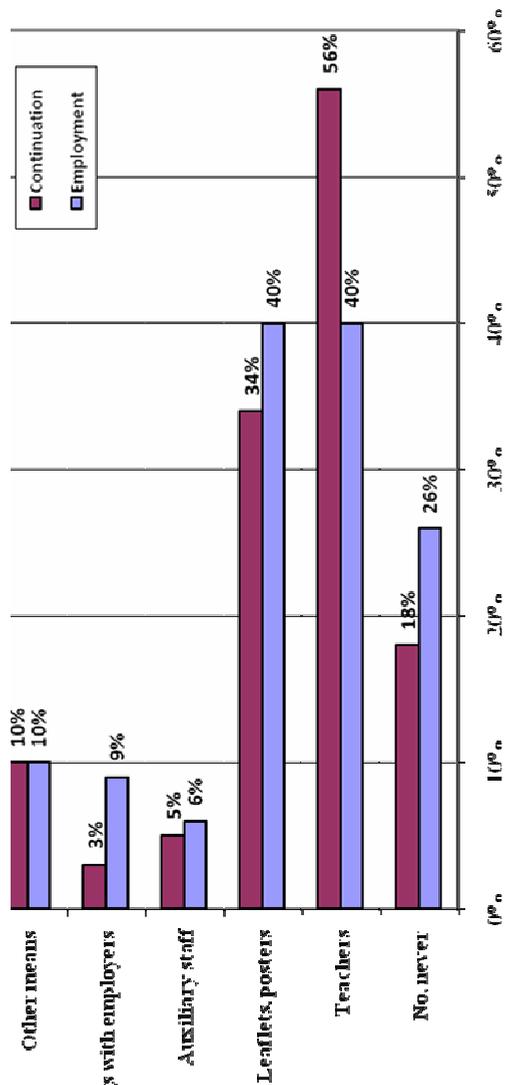
Annex 1

Share of unemployed with higher-education in total unemployed



Source: www.insse.ro/cms/rw/pages/index.ro.do - Monthly Statistical Bulletin—period 12.06 – 06.09

Information sources about professional insertion (employment), and studies' continuation of higher-education graduates



Source: Romanian university system-2007, Soros Foundation Romania

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Annex 3a

Population without any significant job, depending on the age at the moment of leaving the education system and the necessary period for finding the first significant job

Period required for identifying a job	Total	Age group (age on leaving the education system)					
		Under 10 years	10-14 years	15-19 years	20-24 years	25-29 years	30-35 years
Total	1414183	-	78381	936885	334850	59613	3942
Under 3 months	707410	-	37995	412186	216604	37271	3354
3-5 months	12035	-	-	4047	6694	-	-
6-8 months	94367	-	-	61247	26772	4960	-
9-11 months	78592	-	2392	58131	16334	-	-
12-17 months	122209	-	4165	87185	22120	8740	-
18-23 months	74071	-	3013	53462	14525	3071	-
24 months and over	325500	-	29430	260626	31803	2542	-

Obs: Data refer to individuals leaving the education system (by graduation or early school leaving) in the last 10 years and who found a significant job.

Source: Module "Transition from school to work" Survey on labour force in households, 2000, NIS, 2001.

Insertion rate on labour market of the labour force aged between 15 and 34 years who left education, according to training level, on genders and areas (%)

Genders Areas Training levels	Insertion rate on the labour force market	
	6 months as of finalising studies	1 year as of finalising studies
TOTAL	24,4	33,6
Higher	48,6	60,9
Secondary	24,3	35,0
Specialised post-upper secondary or technical for foremen	40,6	49,8
Secondary, including level I	23,0	34,3
Vocational, complementary or apprenticeship	23,2	33,3
Low	10,1	14,6
Male	24,8	34,6
Higher	48,6	60,7
Secondary	24,7	36,4
Specialised post-upper secondary or technical for foremen	36,9	49,6
Secondary, including level I	23,3	36,3
Vocational, complementary or apprenticeship	24,8	35,2
Low	11,8	16,2
Female	24,0	32,6
Higher	48,7	61,1
Secondary	23,9	33,3
Specialised post-upper secondary or technical for foremen	42,8	49,8
Secondary, including level I	22,7	32,5
Vocational, complementary or apprenticeship	20,6	30,0
Low	8,5	13,1
Urban	29,5	39,6
Higher	49,0	61,3

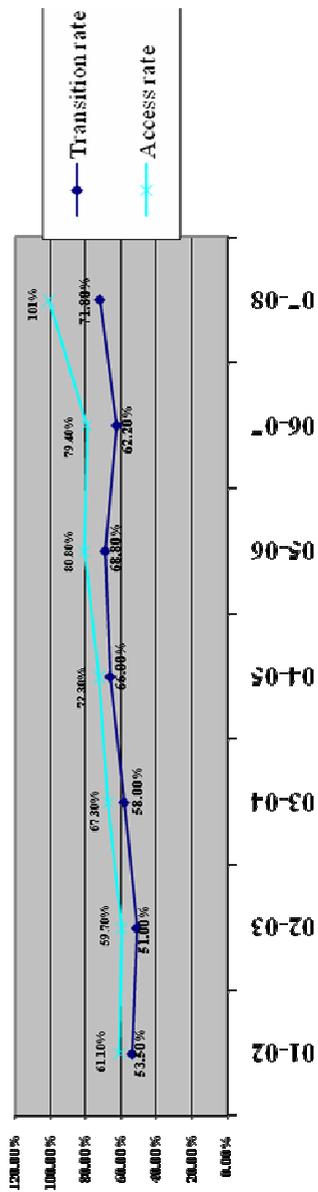
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<i>Secondary</i>	25,7	36,3
Specialised post-upper secondary or technical for foremen	39,8	49,1
Secondary, including level I	24,4	35,6
Vocational, complementary or apprenticeship	23,8	33,7
<i>Low</i>	5,2	8,3
<i>Rural</i>	18,2	26,3
<i>Higher</i>	44,9	56,6
<i>Secondary</i>	22,3	33,0
Specialised post-upper secondary or technical for foremen	44,3	52,7
Secondary, including level I	20,2	31,7
Vocational, complementary or apprenticeship	22,8	32,9
<i>Low</i>	11,8	16,8

Source: NIS, Press release no.237/2009

Annex 4

Transition rate of 12th grade pupils to higher-education and their access rate to the system in Romania

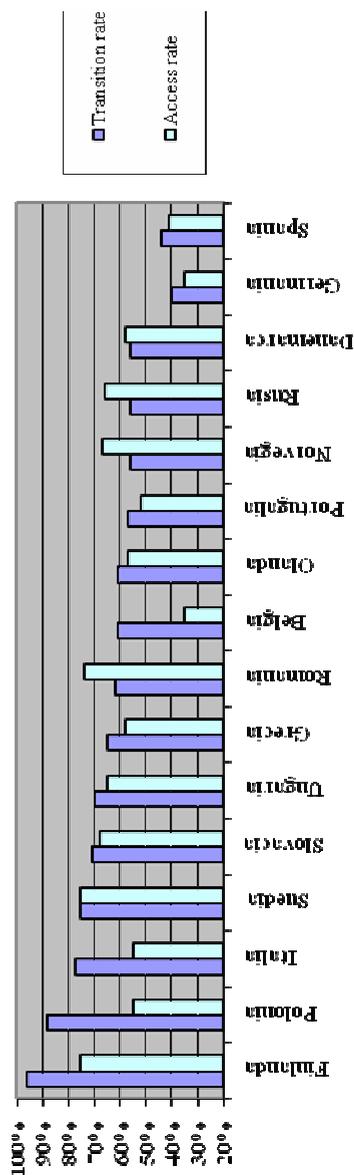


Source: www.insse.ro/cms/rw/pages/index.ro.do- Statistical yearbook

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Annex 5

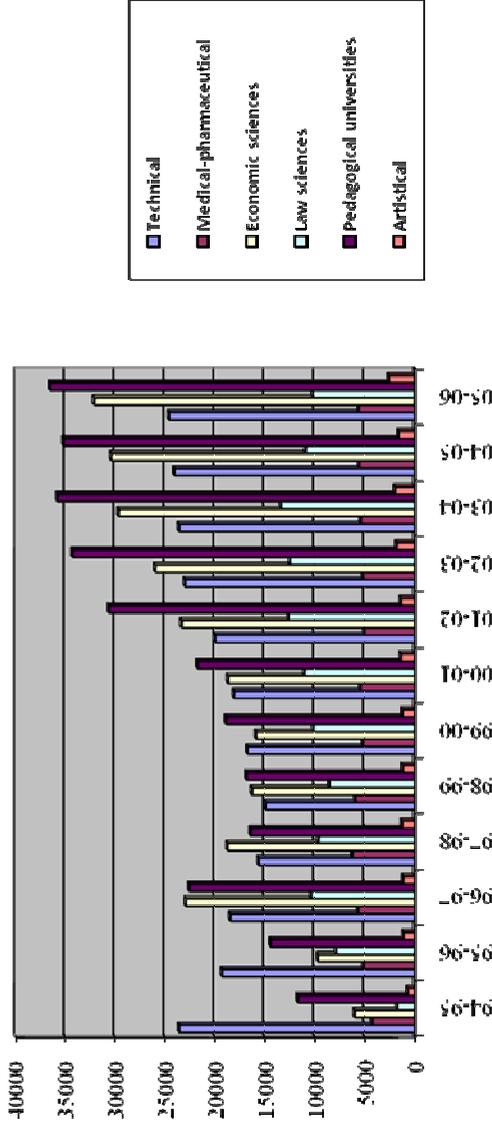
Transition rate of 12th grade pupils to higher-education and their access rate to the system in the main European countries, in 2006



Source: www.oecd.org/edu/eag2008

Annex 6

Higher education graduates on specialisation categories



Source: www.insse.ro/cms/rw/pages/index.ro.do- Statistical yearbook

The matrix of the National Qualifications Framework for Higher Education

The NCHER matrix integrates professional and transversal competencies, while each of the two categories has its own legitimacy and importance in the practice of any profession. They build a heterogeneous match, expressing the professional efficiency and effectiveness of a programme of studies graduate. This matrix represents an integrated approach of the qualifications awarded in higher education and provides two perspectives for their analysis: a horizontal and a vertical one. The vertical perspective highlights the fact that a certain result of the learning process cannot be reached unless two subordinate categories have been accomplished and strengthened. The horizontal perspective proves that each type of learning outcome, for each of the three cycles of study, necessarily integrates the previous levels. Therefore, each learning outcome has a relative autonomy, conditioned by the previously acquired level, both horizontally and vertically. According to the eight generic descriptors, the matrix presents, for each level of higher education, the level descriptors depending on which the professional and transversal competencies are formulated and assessed for each qualification/programme of study. These data are in agreement with the European Qualifications Framework

The NCHER methodology (approved by the Order of the Ministry 4430/ 2009) uses the concepts with the following definitions:

Qualification is a formal outcome of an assessment and validation process, obtained when a competent body determines that an individual has achieved learning outcomes to given standards. Therefore, qualification defines the official recognition of the value of the learning outcomes for the labour market, as well as for continuous education and training, by means of a degree (diploma, certificate), thus granting the legal right of practicing a profession/job.

Learning outcomes define what a learner knows, understands and is able to do on completion of a learning process. These results are defined in terms of knowledge, skills and competences. Therefore, the learning outcomes are understood as that set of knowledge, abilities and competences that a person has acquired and is able to demonstrate after completing the learning process for a certain cycle of study.

Knowledge represents the outcome of the assimilation of information through learning. Knowledge is the body of facts, principles,

theories and practices that is related to a field of work or study. In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual.

Ability means the capacity to apply knowledge and use know-how to complete tasks and solve problems. In the context of the European Qualifications Framework, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments);

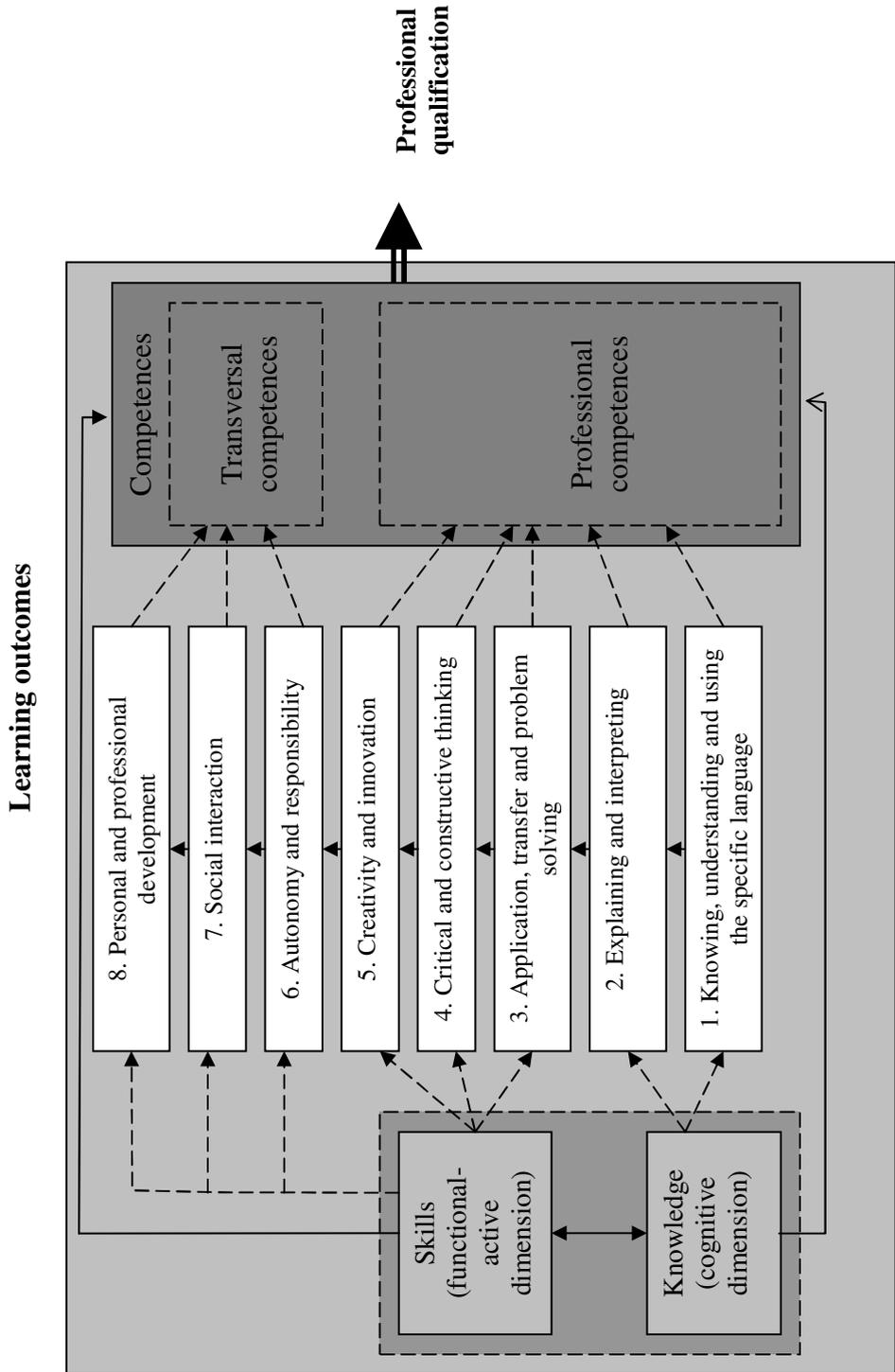
Competence means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy

Source: „The recommendation of the European parliament and the European Council of April 23rd 2008 on the establishment of the European Qualifications Framework for Lifelong Learning”, in: the Official Journal of the European Union C 111 of 6.05.2008 (2008/C 111/01), Annex 1 – Definitions, p. 4.

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		Master's Degree			Doctorate (Ph.D)
Transversal competences	Personal and professional development and competences	8. Personal and professional development	Being aware of the need for continuous development; the efficient use of learning resources and techniques for personal and professional development	Self control of the learning process, the diagnosis of the training needs, the reflexive analysis of their own professional activity	Developing projects focused on creativity as the basis of self-development
		7. Social interaction	Becoming familiar with teamwork tasks and activities and assigning tasks for subordinate levels	Assuming roles/management of professional groups or institutions	Assuming responsibilities and the ability to organize and lead the activities of professional groups, of research or of organizations.
Professional competences	Skills (functional-active dimension)	6. Autonomy and responsibility	The responsible fulfillment of professional tasks under limited autonomy and qualified assistance	Fulfilling complex professional tasks under autonomy and professional independence	Developing and conducting original research, based on advanced methods that lead to the development of scientific, technological knowledge and/or research methodologies.
		5. Creativity and innovation	Developing professional projects by applying methods and principles recognized in the field	Developing professional and/or research projects by using an innovative range of quantitative and qualitative method	Innovative design and development of complex theoretical and practical projects.

			<p>The adequate use of standard assessment criteria and methods in order to measure the quality, merits and limits of certain processes, programs, projects, concepts, methods and theories</p>	<p>Varied and pertinent use of assessment criteria and methods in order to develop valuable judgments and to fundamnt constructive decisions</p>	
	<p>4. Critical and constructive thinking</p>		<p>The integrated use of the concepts and methods in partially defined situations in order to solve new theoretical and practical problems</p>	<p>The critical-constructive assessment of the projects and the scientific research outcomes, assessing the level of theoretical and methodological knowledge; identifying the knowledge and practical priorities of the field.</p>	
	<p>3. Application, transfer and problem solving</p>	<p>Applying basic methods and principles for solving well defined problems and situations, specific to each field under qualified assistance</p>	<p>Using specific knowledge in order to explain and interpret new situation, in general contexts typical for each field.</p>	<p>Selecting and applying advanced principles, theories and methods of knowledge, transfer of methods from one field to another, inter-disciplinary approach in solving new and complex practical and theoretical problems.</p>	
<p>Knowledge</p>	<p>2. Explaining and interpreting</p>	<p>Using the basic knowledge in order to explain and interpret varied types of concepts, situations, processes, projects, etc. specific to the field</p>	<p>The thorough knowledge of the area of expertise and of the theoretical, methodological and</p>	<p>Using advanced principles and methods in order to explain and interpret, from various perspectives, new and complex theoretical and practical situations/problems, specific to the field of research.</p>	
	<p>1. Knowing, understanding and using the specific language</p>	<p>Knowing, understanding the basic concepts, theories and methods of the field and area of expertise and their adequate use in professional communication</p>		<p>The advanced, systematic knowledge of concepts, research, methods, controversies and my hypotheses specific to the field; communications with specialists from related fields.</p>	



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Skills and other achievements (the functional- active dimension)

Knowledge (the cognitive dimension)

- 1. Knowledge, understanding and use of the specific language**
- 2. Explaining and interpreting**
- 3. Application, transfer and problem solving**
- 4. Critical and constructive thinking**
- 5. Creativity and innovation**
- 6. Autonomy and responsibility**
- 7. Social interaction**
- 8. Personal and professional development**

Competences – Transversal competences/Professional competences

Professional qualification

Each type of learning outcome has its own autonomy, indicates specific targets of training, specialized professional training processes and specific assessment processes. These three types of learning outcomes are interdependent and, at the same time, hierarchical in the process of achieving these outcomes, i.e.: certain types of knowledge strengthen skills and another group of knowledge and skills leads to the development of a competence.

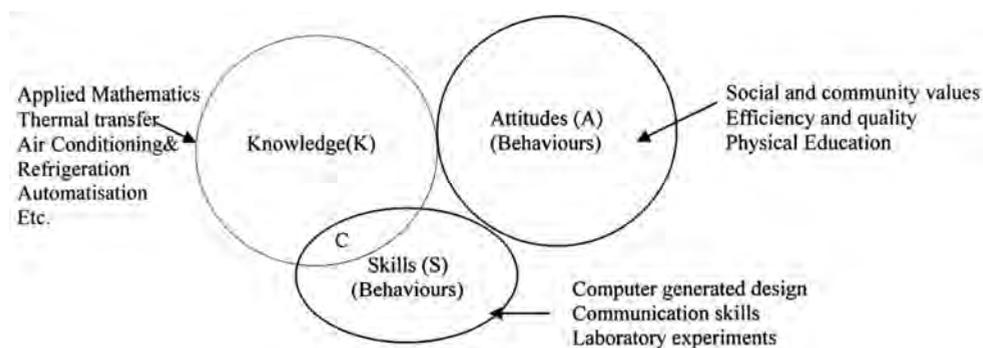
Source: Methodology for designing and using the National Qualifications Framework for higher education (CNCIS), ACPART, 2009, adopted by the Order no. 4.430 of June 29th 2009 on the use of the National Qualifications Framework for higher education, MO, no. 545 of August 5th, 2009 .

Model of competences in the field of science and technology

The final competences required by the market must be studied by identifying and explaining the attitudes, skills and knowledge. The modules that contribute to the achievement of specific competencies must make ensure that the final product (the graduate) meets the expectations of the specific demand of specific competences on the labour market.

The existing curriculum includes clusters of modules that address each of the three components. Overlapping and merge of the three components is not explicitly specified in the existing model.

The diagram representation of the existing curriculum

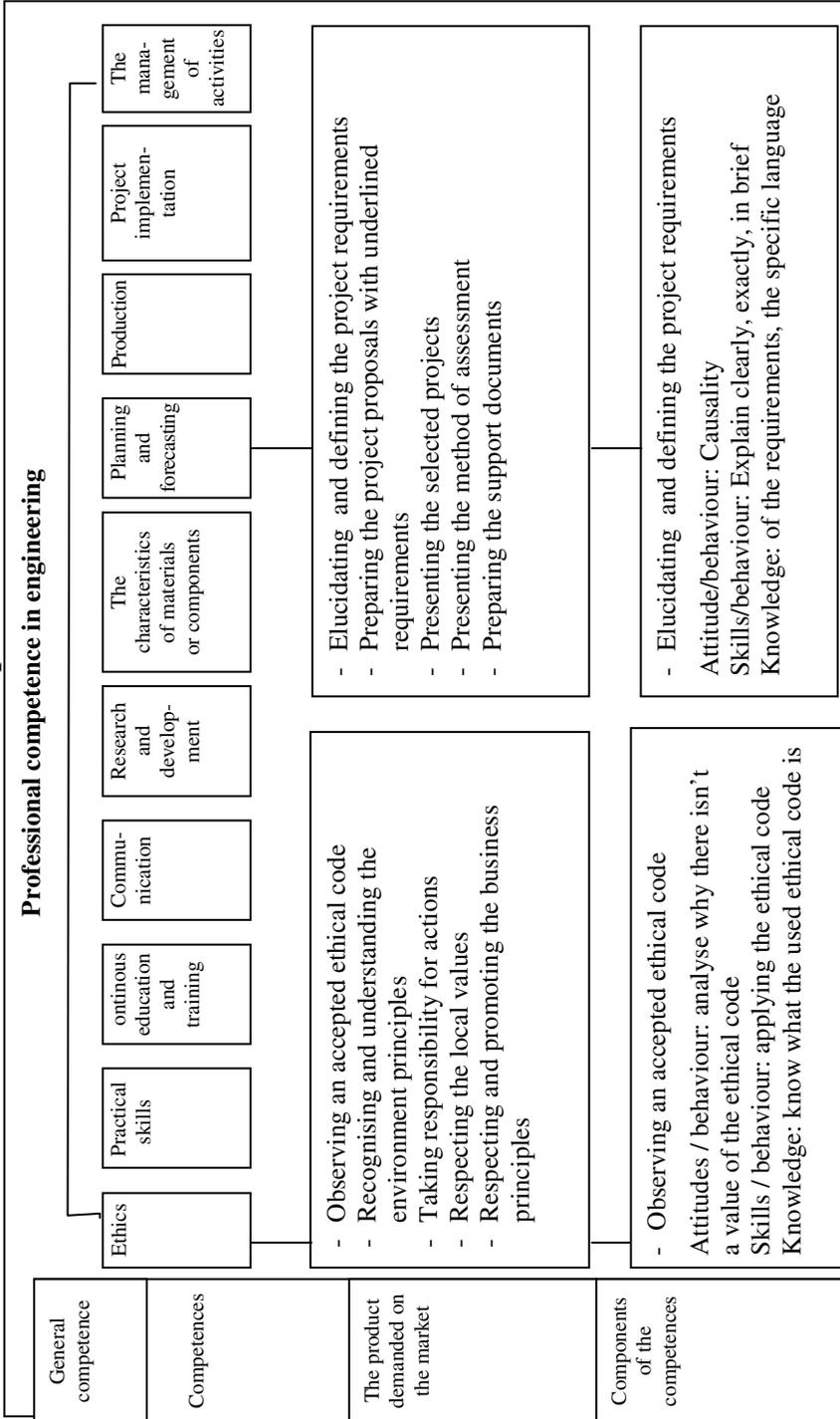


Source: Williams S., Hua, T.M., A competency-based approach to Polytechnic education for the learning age, Paper presented at MERA-ERA Conference: Educational Challenges in the New Millennium, 1-3 December 2001, Malacca, Malaysia

The concept of competence makes reference to the structure and courses of the curriculum that must be adjusted and reformed according to the competencies required on the labour market. The model fusioned, focusing on the fact that all teaching learning experiences are based on the development of the three components of the global competence. When certain skills are acquired, the relevant knowledge in the field must also be analysed, as well as the checking of the attitudes required by that particular qualification. The assessment process must be conducted in such a manner so as to reveal all the knowledge simultaneously.

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Model of Competences



Source: Adapted from Bowden, J.A. & Masters G.N, 1993, Implications for Higher Education of a Competency -Based Approach to Education

A curriculum that focuses on a synthesis of the three components: knowledge, attitudes and skills, can better disseminate the desired qualities, such as: flexibility, adaptability, mobility and thinking skills, innovation skills and the ability to create connections, applications and new possibilities of solving a problem. This model can develop competences both for the improvement of the existing ones and for the development of new ones.

One disadvantage of this model would be that this classification may become an obstacle if there is no synthesis and real fusion among these components, but just a simple enumeration. The heightening of these breeches can lead only to discrete assessments, and to similar outcomes.

The learning appeal of this model consists in the fact that the student will try to fusion transfer and to synthesize the components. Nevertheless, the assessment of such a method doesn't need transfer and synthesis, which would lead to a question of the type: what is the purpose of the course in developing the competences of the employee and the willingness to be competent?

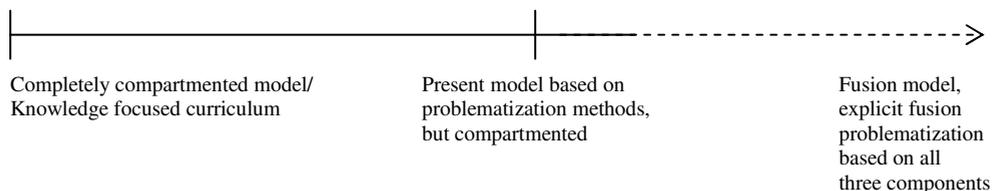
The assessment types and methods should reveal the integration of the components and to rely on performance based models. Assessment can be conducted in several ways, problematical learning being one such way.

Some universities have decided that the present assessment method (of the in-basket type) should be replaced with a much more focused method. This particular change needs the transition towards a more explicit fusion of the components. Thus, each item should satisfyingly cover all the components. This determines the change of the present perception of assessment and also needs an adjustment of the feedback channels of the performance of the graduate, in order to explain both the summative value and the formative one, along with the quantification of their development through learning.

The suggested fusion model needs the fine adjustment of the curriculum in order to identify the desired components, specific for each field. Each model must be revised in order to ensure the explicit encompassing of the three main components of the global competence. The model also requires a new drafting of the type of theoretical and practical assessment, while grading must be changed in order to be correlated with the designated fusion intention.

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The path towards fusion



Source: Williams S., Hua, T.M., A competency-based approach to Polytechnic education for the learning age, Paper presented at MERA-ERA Conference: Educational Challenges in the New Millenium, 1-3 December 2001, Malacca, Malaysia

Note the **four stages** of this process towards the fusion model:

- a) The revision of the curriculum in terms of general and specific competences: revision of the qualifications awarded in the diploma as a single global competence or as a set of relevant competences; regrouping the modules/courses/subjects in order to ensure the respective competences;
- b) Focusing the modules/courses on the results: identifying the results by teaching a module/course for the specific acquirement of a certain competence; the explicit specification of the knowledge, attitude and skills components for the required (desired) product;
- c) Revising the structure and contents of the existing modules/courses;
- d) Drafting the documents for each module (result/required product, required competences, assessment and grading methods, teaching and learning strategies).

The development of the proposed model requires the careful reassessment of the curriculum, of the modules/courses, and depends on the professionalism of the teaching staff involved in the process, as it entails: highlighting the performance indices necessary for certifying the existence of the competences, identifying the specific competences generated by this model, stating the exact attitudes, skills and knowledge required; identifying and clustering the various models and courses that contribute to the development and improvement of the different competences, analysing and revising the assessment and grading methods.

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