

University Autonomy - the Current Trend in Educational Reform. The Romanian Higher Education System in Line with the *Bologna Agreement*

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Abstract: The paper emphasizes that decentralization is not an end in itself. It is part of the national strategy of decentralization and is intended to create an educational system organized, administered and financed by European rigors regarding the quality assurance in educational training process. The paper also refers to the fact that Education Act and other legal provisions insist on the components that define university autonomy: the deciding on the internal structure of the institution, the planning, organizing, improving of the educational process.

The issue of decentralization is discussed in light of the fact that a real reform of academic education has as a major aim the development of the free and creative personality, its social function being integration in social order and change. The paper highlights many aspects of the fact that such a reform starts from reality and from traditions, secures equal chances of access to and success in education, answers the challenges of contemporary world.

Key-Words: globalization, European integration, decentralization, reform of education, lifelong education, quality of education, equality of chances, management

1 Introduction

The multiple and complex problems of decentralization in the academic domain in Romania are in accordance with the Bologna process. For a real quality management system it is important to establish goals clearly, to decide which form of decentralization would be undertaken for different functions [1]. Another goal is to assess the institutional capacity of administrative levels that would be given responsibilities. At the same time, what it is significant is to identify laws and regulations that would need to be modified in order to implement the reforms and to map out the links between different levels of government that are responsible for aspects of education.

The paper emphasizes that the overall objective of the decentralization is to contribute to assess potential gaps between the law and practice, to determine the best sequence of implementation in order to achieve greater effectiveness in the use of scarce resources. The first institutes of higher education that functioned in the territory of Romania were Academia Vasiliana (1640) founded

by prince Vasile Lupu in Iasi as a 'higher school for Latin and Slavonic languages' and the Academy of Bucharest opened at the end of the 17th c. by prince Constantin Brancoveanu.

The foundations for higher education in Romanian language were laid down in the 19th c. In 1835 the Academia Mihaileana was set up in Iasi and in 1852 in Bucharest the School of Agriculture was opened, the forerunner of today's Agronomic Institute. In 1857, the National School for Medicine and Surgery was set up in Bucharest.

Higher education in civil engineering in Romania came into being in 1818 with a School for Land Surveyors, which in 1864 became The School of Bridges and Roads, Mines and Architecture, the nucleus of the Polytechnic School in Bucharest. It was also in 1864 that the foundations of the fine arts higher education were laid down.

The first Romanian universities were established by Prince Alexandru Ioan Cuza - the University of Iasi (1860) and the Bucharest University (1864) - under whose rule was issued the first Public Education Law (1864), which regulated the whole system of

school education from primary to university education. At the end of the 19th c., different fields of education were regulated by separate pieces of legislation: the Law of Primary Education (1893), the Law of Secondary and Higher Education (1898), the Law of Vocational Education (1899).

In Transylvania, in 1872, the Cluj University was set up and in Bucovina, the University of Cernauti (1875). After 1918, the Romanian system of education was unitary regulated by the new laws issued in 1924-1928. Between the two World Wars the network of higher education institutions was strongly developed.

In 1948, after the onset of the Communist rule, education was organised by the State as a unitary highly centralized structure. Completely separated from the Church, education was accessible to all children. However, due to a structural imbalance, and a chronic lack of material resources, an effect of the economic crisis, the growth of the higher education was inhibited, both in terms of technical and material resources - chronically outdated and insufficient - and in point of number of students.

In the academic year 1975/1976, there were 42 higher education institutions in 20 university centres, among them 7 universities with a total number of 164,567 students.

After the overthrow of the Communist rule in 1989, the higher education institutions themselves initiated a major reform. Under the reform programme, the number of students enrolled in various study programmes available in Romania has been on a constant increase in the last decade, reaching almost 650 thousands for the 2004-2005 academic year. This huge increase is also the result of the introduction of a new opportunity for the Romanian citizens to pursue studies based on tuition fees.

University autonomy refers to the right of university communities of managing themselves, of exerting their academic freedom without ideological, political or religious interference. The document regulating the activity of any university is the University Charter, adopted by the Senate of each higher education institution.

The leading bodies are elected, by secret ballot, for a period of four years, according to the University Charter of each higher education institution. The higher education institutions are led by senates and the faculties and departments by councils. The senates are presided over by chancellors, the faculty councils by deans, and those of the departments by directors. Their attributions are stipulated by University Charter. The executive leadership of the higher education institution is provided by the

senate bureau, including the chancellor, the vice-chancellors, the Secretary of the university senate and the administrative general manager.

From the perspective of sustainable development and globalization of education, to create the necessary prerequisites to ensure quality education and efficient use of resources, decentralization is constituted in a dynamic approach that requires commitment and accountability on the one hand, and strategic thinking and control, on the other.

A major problem of any contemporary reform of higher education is represented by the organization of the educational offer so as to match the diversification of the educational demands of students, in the circumstances of growing financial difficulties. The solution of organizing and reforming education from the perspective of permanent education appears to be a realistic one as it allows for the creation of certain flexible bridges between levels and routes of education [4].

A real reform of education has as a major aim the development of the free and creative personality, its social function being integration in social order and change. Such a reform starts from reality and from traditions, secures equal chances of access to and success in education, answers the challenges of contemporary world, of the new economies, based on computer technologies of communication, on knowledge and creativity, changes consumerist mentalities into creative attitudes. A challenge comes from the difficulty of achieving at the same time and to the same extent an equality of chances at the highest qualitative level of education. Another comes from the processes of globalization and integration and refers to the preserving of national identity and dignity, the developing of national heritage, the assertion of the national creative spirit. The reform of education will have to take into account: the major aims of the social, economic, political project, the needs and aspirations of young people, the cultural and pedagogical level of society, the resources of the system, the adherence of social agents to change, the succession of stages in the logic of the reform [11].

The reforms in education must be a step in front the economic ones - without being isolated from them - in order to develop the tendencies of stability and economic growth. If the revival of economic growth is a condition of a lasting social and educational development, the success of the education reform is a premise for the macro-structural economic reforms that primarily aim at the development of certain sectors (tertiary - from the sphere of services, health, education) new professions and jobs, new attitudes towards performance, competition, merit, risk, the

new social middle class that encourages economic, social and political pluralism [5].

Changes in education will be submitted to a triple impact: cultural traditions, the current problems of the world, the problems of the future. The reforms of education, by extending the duration of compulsory education, encourage the democratization of society as they reduce the dependence of the social position of a person on his/her social origin. From this perspective, the priorities of educational reforms are:

- the securing of equal chances of getting education,
- the improvement of the quality of education,
- the assertion of the organizing principle of continuous education - at all ages and along all alternative educational routes (formal, non-formal and informal).

If education doesn't succeed as a factor increasing professionalism and stimulating the freedom of creation, then the costs will be higher as we will have to spend more on public services or the social protection of those who are not easily adaptable to social and professional and cultural integration. The problem of striking a balance between the demand for social and professional training and the educational offer will be solved both by prognoses about the labour force market and, mainly, by training extremely adaptable graduates (multiple skills).

The current trend in educational reform must be preserved and adjusted on the way, so that the process of European integration be a constant attribute of this approach [3]. In this context, the coordinates of future efforts might be:

- securing the equality of chances of getting education by a judicious organization of the education network, by a pluralist educational offer;
- eliminating the difficulties created by the inappropriate quality of economic infrastructure and local services, by the insufficiency and non-uniform distribution of funds, by the quality of the equipment and human resources;
- compensating the disadvantages created by the social and economic context in which the educational system operates, by restoring confidence and interest in the social and professional success through education;

- becoming part of the European Higher Education Area;
- realization of lifelong learning for all, with increased role of ICT.

Since October 2006 university accreditation issues are dealt with by the Romanian Agency for Quality Assurance in Higher Education.

According to the information posted on the website of the Romanian Agency for Quality Assurance in Higher Education www.aracis.ro, there are 56 accredited public universities, 32 accredited private universities, and 23 institutions enjoying temporary accreditation.

2 The Social Dimension of the Bologna Process

The changes within higher education due to the Bologna Process require the restructuring of social support national system. In Romania the social dimension of Bologna Process is shaped by state scholarships and grants (study and social grants, performance scholarships - excellence and merit scholarships, research grants), subsidized accommodation and meals, help with travelling expenses, support with health services.

As member of the Bologna process, the Romanian Ministry of Education and Research included both in the National Reform Programme 2007-2010 and in the National Development Plan 2007-2013, as well as in the ministry strategy for 2006-2008 provisions on the development, implementation, updating and monitoring the National Qualifications Framework for Higher Education (NQFHE). Government Decision 1357/2005 provides for setting up ACPART (National Agency for Qualifications in higher Education and Partnership with Economic and Social Medium) as national authority for the development and regular update of the National Qualifications Framework for Higher Education. Here are several initiatives regarding the implementation of Bologna decisions in Romania:

- Design of National Qualifications Framework for Higher Education and development of the specific Methodology by ACPART (National Agency for Qualifications in higher Education and Partnership with Economic and Social Medium), instruments which are compatible with the Overarching Framework for Qualifications of the EHEA (European Higher Education Area) and with the

Recommendation of the European Parliament and of the Council of 23 April 2008;

- Universities interest and responsiveness to the implementation of a National Qualifications Framework for Higher Education, as sole instrument determining the structure of qualifications in higher education;
- Implementation of projects involving national and international institutions and bodies with responsibilities in the field of qualifications (funded by Leonardo da Vinci, Lifelong Learning, PHARE and ESF);
- National and international actions (conferences, seminars, international summer school UNISO – UNiversity in SOciety) organised by or involving participation of ACPART (National Agency for Qualifications in Higher Education and Partnership with the Economic and Social Environment) in order to develop and implement NQFHE (National Qualifications Framework for Higher Education) efficiently and effectively;
- A number of university teaching staff involved in piloting the NQFHE Methodology and their availability to act as experts for the description of qualifications in higher education;
- Government Decision 890/2008 on the titles of qualifications and awards granted to graduates of Bachelor higher education studies enrolled in their first study year during academic years 2005-2006, 2006-2007, 2007-2008 and Ordinance 4868/07.08.2006 issued by the Minister of Education on the Diploma Supplement for the first Bologna graduates;
- Presidential Commission Report – 2008 on the analysis and development of policies in education and research – *Romania of Education, Romania of Research* which refers to the development of the National Qualifications Framework;
- Order no 4430/29.06.2009 issued by the Minister of Education, Research and Innovation on the implementation of the

NQF (National Qualifications Framework) in Higher Education

The Romanian higher education system has been in line with the Bologna Agreement. As a result, most Bachelor's programs take 3 years to complete. However, some programs last longer – for example, some technical fields, medicine and architecture. Master's programs take 2 years beyond the Bachelor's degree. Master's programs are a prerequisite for admission to Ph.D. programs. Ph.D. programs usually take 3 years to complete. Under special circumstances, the duration of study may be extended by 1 or 2 years. In addition to budgetary scholarships and loans, students may receive private scholarships from employers to fully or partially cover their tuition fees and living expenses.

In order to improve the access of students from rural areas to higher education, there are study scholarships awarded on the basis of the commitment to teach in rural education for a period of time at least equal to the duration of their studies. In order to assure an equal access for disadvantaged groups, Roma population may benefit at the university admission examination from 400 public budgetary places under the condition of fulfilling admission minimum criteria.

Offering subsidies for non-residence halls accommodation was a helpful measure taken for solving the issue of student accommodation.

From 2004 Romania participated as observer to Euro-student project, a monitoring system with regard to the socio-economic living conditions of higher education students in European Union countries [10]. This could easily develop to become an important instrument for Romania to provide valuable information for higher education policy.

In Romania, Bologna strategies materialized through the following measures:

- The multiplication of efforts in view of ensuring quality particularly with higher education institutions and through a national body, in the context of European recommendations and evolutions;
- To elaborate a national framework of qualifications in correlation with studies on the labour market and compatible with the future European Qualifications Framework;
- Monitoring of graduates' insertion within the labour market;
- A full operationalization of European transfer credit and accumulation system;

- The participation of Romania in programmes and actions aiming at the internationalization of higher education.

Equally Romanian higher education system has to cope with the following challenges:

- Candidates' focus only on some higher education fields, which leads to a lack of correlation between higher education offer and current employment possibilities on the labour market;
- A possibility that employers to fear about the relevance of first degrees on labour market;
- To create new specializations in order to fulfil labour market demands;
- The development of higher education which will have to lead to the development and improvement of quality assurance procedures and funding mechanism;
- Insufficient contribution of the private sector to lifelong learning;
- Adult's low participation in lifelong learning;
- To create a better connection between the universities and socio-economic/cultural environment;
- Improvement of transfer mechanisms regarding scientific research outcomes.

2.1 Links with the European Qualifications Framework

- Memorandum on nominating the National Adult Training Board as the National Authority for Qualifications -- NAQ/NATB signed by the Romanian Government in June 2004;
- Amendment and completion of Law 132/1999 by Law 559/December 7, 2004, adding to the NATB responsibilities the following: development and implementation of methodologies on the occupational analysis, qualifications and their validation, certification of professional competences and qualifications, development and update of the National Register for Qualifications;
- *National Tripartite Agreement on the National Qualifications Framework* } signed by representatives of the Romanian Government (Ministry of Education and Research, Ministry of Economy and Commerce, Ministry of European Integration, Ministry of Public Finance, Ministry of Labour, Social Solidarity and

Family), of employers and trade unions confederations, representative at national level (Bucharest, 23.02.2005);

- Common principles for quality assurance are applied in initial vocational education and training, according to the Overarching Framework for Qualifications of the EHEA(European High Education Area);
- Mechanisms for validation of competences acquired in non-formal and informal contexts are operational in continuing vocational training.

2.2 Opportunities

- Involvement of all decision-makers in the description of qualifications, including employers;
- Students/graduates agree on the National Qualifications Framework as an instrument to match the universities provision with the labour market needs;
- Direct support of universities and other social partners for the development and implementation of the National Qualifications Framework for Higher Education;
- Description of qualifications in higher education in line with the descriptors used in the Overarching Framework for Qualifications of the EHEA(European High Education Area);
- Ensuring transparency and visibility of the educational system at national level as well as comparability and compatibility with the European Higher Education Area;
- Facilitating mobility of students and employees, both at national and international level;
- Development of university curricula based on learning outcomes, focusing on student-centred learning;
- Facilitating *lifelong learning*, including after graduation of a Bachelor or Master's study programme.

3 Aspects of Autonomy of Higher Education Institutions

University autonomy is fully guaranteed by the provisions of Romania's Constitution, art.32 (6), which stipulates that 'the autonomy of the Universities is guaranteed' and those of the Education Law no.84/1995 (Section 7), article 92 (2) *academic autonomy refers to institutional management, structuring and operation, teaching and scientific research activities, administration and financing*, consolidated. It relies on the right of the university community to its own leadership and on its right to benefit from academic freedom without any political, ideological or religious constraints. It also relies on its right to assume a set of competencies and obligations in accordance with the national strategic directions set for the development of higher education, stipulated by the law [7].

The whole set of rights and obligations as well as the norms underlying the life of the university community are to be found in the University Chart adopted by the university senate, according to the law. Here are some of the most important:

3.1 Short and Long-cycle Higher Education.

- State higher education is tax-free for the enrolment figure approved by the Government yearly which is financed from the national budget and tuition-fee based for the candidates who got a mark lower than that of the last successful candidate in the entrance examination. The enrolment figure for the candidates that pay tuition fees and the amount of the fees are established by the university senate. Even in the tax-free state higher education system, certain fees are required (for the extension of the duration of studies stipulated by the law, for the entrance examination, for registrations, for make-up examinations).

- Only baccalaureate diploma holders can sit in the entrance examination, the organization of the examination lying within the competence of each higher education institution. High school graduates who in the last two years at school got awards in the international school competitions, in arts or sporting competitions (European, world or Olympic) are registered in the university education system without having to sit in the entrance examination).

- In accordance with the stipulations of act 60 of April 24, 2000 regarding the rights of the graduates from the accredited private universities to sit for the final graduation exam at accredited state higher

education institutions, the respective graduates can take the final graduation exam at the institutions where the disciplines they have specialized in - or related disciplines - are accredited.

- The graduates from the short-cycle education system (university Colleges) can continue their studies in the long-cycle system in the same domain they have specialized in, or in a related one. The successful candidates sit in a make-up examination and are enrolled in the year corresponding to the examinations that have been passed and recognized.

- Short-cycle higher education studies end up with a graduation examination, the long-cycle ones end-up with a first-degree final examination or with a diploma examination (the latter, for a duration of studies of at least four years).

- The graduates who passed the final examination get a graduation diploma (in the case of short-cycle education), or a first degree diploma, an engineer's diploma, an architect's diploma, a physician's diploma, respectively, in the case of long-cycle education. If the graduates did not pass the final examination, the first degree examination or the diploma examination, they get a certificate of short/long-cycle university education (for details, see Order no 5124/2000).

- The graduates who attended the courses organized by the Department for the training of teaching staff, and got a graduation certificate, or those who were trained in educational psychology during the first three years of work in the field of education, can practice the teaching profession.

3.2 Postgraduate Education

Postgraduate education includes: advanced studies (2-3 semester studies in the domain of specialization), master studies 2-4 semesters, they include several domains of specialization and end up with a dissertation), doctoral studies, postgraduate university studies, postgraduate specialized studies, postgraduate proficiency studies.

3.3 Higher Education Institutions and Students

Students participate in and influence the organisation and content of education at universities and other higher education institutions and at the national level.

According to the Statute of Teaching Staff Law no. 128/1997 students are represented in the university senate (minimum 25%), elected according to the law.

The executive administration of the university is assured by the University Senate Office composed by rector, vice-rectors, scientific secretary, administrative general director and a representative of students or students' legal entities. The rector can invite at the Office meetings representatives of syndicates and students' associations or any other stakeholders.

In the Faculty Councils students are represented in a proportion of 1 out of 4.

At national level student's associations are consulted by the ministry in each concern and regulation related to their status.

4 Scientific Research and University Autonomy

Higher education in Romania is offered in both public and private higher education institutions.

Higher education institutions are coordinated by the Ministry of Education and Research. Under the authority of the ministry there are agencies that play a very important role in fields such as financing and scientific research:

- *The National Rectors Council* is composed by all rectors of accredited higher education institutions and is a very active body consulted by the ministry. Its role in adopting the new legislation regarding the reorganization of university studies was fundamental. According to the new law 288/2004, the length of study cycles on fields and specializations will be set by the Ministry of Education and Research, at the proposal of the National Rectors Council which will be approved by Government decision.
- *The National Council for Higher Education Financing* (CNFIS) that was constituted following the order of the Minister of Education and Research and acts as a consultancy. Its main responsibilities are to present the minister of education proposals regarding future financing necessities for higher education. It has to take into account the objectives of future university strategies and national strategies to develop higher education; it also has to distribute budget funds to higher education institutions and use foreign financial sources, to award

grants and other forms of material support provided by the budget to students.

- *The National Council for Scientific Research in Higher Education* (CNCSIS) that was constituted at the end of 1994 and has been an important part of the reform in higher education ever since. CNCSIS is the main institution to finance scientific research in Romanian universities and graduate academic studies. It is autonomous, works under the ultimate authority of the Ministry of Education and Research and expresses the point of view of the academic community regarding scientific research. It is organized in 6 commissions whose members are university or research specialists. In the process of allotting funds for research in universities and evaluating performance in scientific research CNCSIS makes the connection between the university community and the Ministry of Education and Research representing the Government.

CNCSIS and CNFIS correlate their activity and the funds allotted on a competitive basis are part and parcel of the alternative system of funding for higher education and research. The competitive system encourages and promotes genuine scientific values.

- *The National Agency for Qualifications in Higher Education and Partnership with the Economic and Social Environment* (ACPART) is the national authority for qualifications in higher education, having specific attributions in promoting the partnerships between universities and enterprises for education and training in the context of sustainable development.

The state higher education sector in Romania comprises 56 state higher education institutions and other 20 private higher education institutions.

Private higher education is an alternative to public education. It is subject to an accreditation process. Accredited private institutions may obtain state support.

Universities are the largest higher education institutions. They include a large number of departments and programs that confer academic diplomas and scientific titles. Universities combine teaching responsibilities with those related to research activities.

Academies are higher education institutions that prepare their graduates in a certain specific field:

economics and business administration, arts, music etc.

Polytechnic Universities train students for technical fields of study. This name was given starting with 1990 to the former polytechnic institutes.

Institutes are higher education units, which confer vocational diplomas and qualifications, based on studies and professional experience in limited specialization fields.

The institutions for higher education can organize and run units, centres of research, centres for preparing human resources, production units, other institutional structures, they can organize and unfold higher education programmes in cooperation with other similar institutions in the country or abroad.

The Education Act and other legal provisions insist on the components that define university autonomy: the deciding on the internal structure of the institution, the planning, organizing, improving of the educational process, the organizing of the entrance examination and the decision upon the criteria for the assessment of student's performance, the planning and organizing of postgraduate studies, the selection and promotion of teaching staff, the establishing of the criteria for evaluating the latter's results, the awarding of academic and scientific titles, the organizing of research, documentation, publishing activities, cooperation programmes, the election of the management bodies, the identification of the financial and material needs, the use and managing of financial resources, the awarding of scholarships, the setting up of foundations, the maintaining of order and discipline in the university areas [8].

In terms of learning, we are still in the early phases of shifting from technology primarily focused on the delivery of content to solutions that embed learning into our daily environments, that understand the individual learner/teacher and that adapt to his/her needs. That is why we point out the fact that at the University *Politehnica* of Bucharest there is The Centre for Advanced Technologies – CTANM. The Centre for Advanced Technologies (CTANM) is a research and training unit of the University *Politehnica* of Bucharest founded for continuing the high achievements on a three years Tempus project ended in 1997.

Founded in 1996, CTANM has financial and functional autonomy inside UPB and is acting inside the Faculty of Engineering and Management of Technological Systems, the Manufacturing Engineering Department and with close links with over 15 other departments from UPB. The highest part of the CTANM financing is realised through

participation in Joint European Projects (over 30 projects).

The areas of expertise developed by CTANM within the European Projects are :

- Management of European Projects
- Knowledge triangle education-research-innovation
- Development of partnerships with enterprises
- Graduate and post-graduate training courses
- Training programs and courses specially designed on customer demand
- Evolving of training programmes based on tutoring and coaching.
- Modernization of curricula with innovative learning content
- European Credit Transfer System (ECTS) and recognition of degrees
- Training of non-university teachers
- Training courses for public services (ministries, regional/local authorities)
- Strategy of Total Quality Management in Education Organizations
- Quality and technological audit of the SME's
- Project Management
- Incubator Schemes; Knowledge Transfer; Technology Transfer and Research and Development
- Cooperation with Romanian enterprises including SME's (bring Romanian SME's in partnership or disseminate the results of projects in Romanian SME's)
- Dissemination of European projects and translation of teaching materials in Romania
- Creation of WEB pages and CD Rom's
- Designing of multimedia educational software
- Open and distance learning
- Regional development
- Sectorial development
- Advance of international relations

Until better tools appear, there are opportunities for us to take advantage of existing information technology. The Internet could be used to distribute a course on how to transfer documents. An associated bulletin board could provide answers to questions from novice users. Professors could create and test a clear set of instructions for use of a standard set of tools and make these instructions and tools available to the students' community. The goal is clear – professors and researchers must harness

the Internet to increase the community's capacity for collaboration.

5 The Involvement of Society in the Process of Changing the Educational System

Almost each segment of the society we live in is more or less involved in a process of changing, process that has been also accelerated due to the use of the Internet at a large scale. The ICT revolution has been giving great impacts on all kinds of human activities. Educational and training activities are no exception. Rather, it could be said that the impact on them is larger than those on others. Also, the constantly changing knowledge requires constant learning, that is, life-long learning (LLL) and anytime & anywhere learning. Globalisation creates a market of education services, with identical rules as in any other service market [8]. Educational organizations and institutions move from a fragmented information culture populated with disparate legacy systems to what is known as a 'contextual collaborative' culture, a real-time, knowledge-sharing system. Because of this, many academic institutions, even those with high prestige, are found in a situation where they might lose some of their students in favour of other institutions, which although they are located at greater distances are better anchored in the education market. More than that, in this 'education market' some new players have successfully entered, as companies from the economical sector, which started to develop their own training centers.

The precise form of on-line pedagogy varies from one case to another, but is generally consistent with an educational philosophy of personal instruction and strong faculty support for students. Some courses can be taken entirely online, but most require some attendance on-campus. Almost all courses are written by full-time faculty (selected on the basis of internal competition); the teaching of a course generally becomes part of normal faculty workload. Most participating institutions use proprietary platforms to deliver courses to students on-campus, and the Internet for external students. Library and bibliographic services are generally made available through the institution providing the programme.

A central unit provides support for a Web-based catalogue of online programmes in member institutions, and additionally facilitates the training of faculty and the collaborative development of

online courses. The central infrastructure to support the network (the search engine for an online catalogue, for example, and the user-interface) was developed with the support of specialists in member institutions. Similarly, media-production units in participating institutions are commissioned to produce the required course materials (to be made available through the network).

A key objective in developing the online programme was to facilitate the adoption of an innovative pedagogy, attuned to the pedagogical and curricular challenge of the particular subject matter and student group. Part of the cost of developing the programme was met through support from external companies that required their mid-career managers, located in some twenty countries around the world, to have access to post-graduate education in business economics. Faculty worked with industry representatives in developing a programme that was academically demanding, and responsive to the challenges confronting managers in those companies competing in a global market.

The pedagogical approach is based on a marked (even radical) departure from traditional practice, requiring considerable and ongoing participation and peer collaboration by students. Part of this activity requires students to address a continuing series of problem-focussed tasks related to emerging 'real-life' corporate challenges. Students are required to identify the parameters of the challenge; and to apply statistical and other analytical techniques, and to source appropriate data sets, to support their analysis and response. To facilitate this activity, students have continuing access to central servers furnished with extensive 'real' data sets and an archive of related literature (compiled by faculty).

Teaching on the programme is a core-activity for this group of academics. The faculty-led initiative involved substantive commitment by staff in initiating and developing the programme and in teaching students. The difficulty of sustaining high input by research-active faculty in the longer-term is a potential weakness of such faculty-led initiatives. Not surprisingly, universities with longer established faculty-led programmes tend to develop strategies to minimise the demands on faculty time, often by automating or delegating routine or repetitive tasks, or less commonly by adopting pedagogic and technical strategies to minimize the input required of academic staff.

Faculty-led initiatives are more common at the post-graduate level and in subjects with a strong disciplinary or sectorial orientation (e.g., engineering). They are often provided by

universities with a strong research orientation, through departments of high standing among peers in the relevant discipline or profession. Courses may be developed around the expertise and reputation of particular faculty members, in effect building on (and potentially contributing to) the peer-status of individual faculty, and of the department as a whole. The proximate reasons for advancing a proposal differ from one case to another, but are usually closely tied to the interests of the relevant department or school. A desire to secure additional funding for research or additional teaching posts, or to reach a wider and more diverse student population, perhaps embracing high-calibre post-graduate research students, may also be important. Other reasons may include the links to industry the initiative can provide, and the concomitant opportunity to secure external funding for related research (including sponsorship of doctoral-research students).

The provisions of the reform extended communication with external factors, among which we can mention, the local council and businesses, community factors. Through the new managerial and financial legislation that refers to the decentralization and autonomy of the educational units, the bases are laid for one of the fundamental objectives of reform in Romania [9]. In this respect we will mention the principles of the decentralization process:

- a) Public liability. All institutions and organizations participating in the educational services regardless of their legal status, would be responsible, publicly, for the quality of education services offered, in relation to their functions and responsibilities.
- b) Institutional autonomy. Decentralization will pursue the development of university institutional autonomy, of its ability to take relevant decisions.
- c) Decision center is to be near the place of education act to make serious and responsible decisions.
- d) Transparency of the decision which means everyone has access to public information.
- e) Promotion of human resource. Teachers must be recognized as a key driver of development. Therefore, it will seek special attention to initial and ongoing training, and professional development of teachers.
- f) The transfer and accountability in local decision-making in order to bring the decision closer to those

who are directly interested in it.

g) Cultural and ethnic diversity. In the educational institutions will be stimulated expression of elements of cultural identity of different social groups belonging to the community.

h) Ethical approach to educational services by adopting and enforcing codes of conduct for teaching staff, and for that of the control, quality assurance and management.

Given these principles is necessary a greater responsibility and initiative in establishing the curriculum, in managing the extra-budgetary financial sources, as well as in the domain of selecting one's own human resources.

The foundation for reform is the decentralisation of authority from the government to the universities and inevitably the main thrust of this process is the transfer of financial responsibility - undoubtedly the most serious challenge facing the architects of the programme [6].

In developing and promoting the e-learning system in the University *Politehnica* of Bucharest we have discovered a social phenomenon that has proved to be an opportunity for our activity. We have found out that ICT revolution induce deep changes in human lifestyle. There does seem to be a distinct difference in how the young generation learns compared with older adults. The experience of younger learners with television, video games and computers, with a corresponding reduction in the amount of time spent reading, means that they actually think differently. The technology of e-learning, because it resembles the media familiar to younger learners, demands that they get actively involved in the learning experience. The resulting shift is a change from receptive learning to active learning. When it comes to e-learning many institutions have focused on self paced, CBT (computer based training) courses. The reason for this switch was to reduce the reliance on instructor led courses. Results have not always been spectacular as students take a half-hearted approach to courses, not starting, dropping out or generally not learning much. We have chosen a model of leader led e-learning system, in which instructors play a central role in either delivering presentations or moderating discussions. Without an instructor to provide motivation, prodding or guidance, the learner often feels isolated or lost. Designing and implementing an e-learning integrated system have two major stages. The first one is about developing the *matrix* of the system or *Learning Management*

System (LMS), as e-learning insiders call it. In the second stage this *matrix* must be filled with the educational content. Some LMS provide authoring tools. Some contain competency instruments that help students select courses to match gaps in their skills and knowledge. Learning Management System can also vary in their look. Some are 3D representations of learning environments, with fancy graphical metaphors for rooms and learning activities, while others are plain, text-based interfaces. Some are strong on video and other bandwidth consuming media. Some link competencies to courses and allow students to select courses to bridge gaps in their personal competencies. Others simply list courses. But a LMS (Learning Management System) must have a few basic features:

- High availability: The LMS must be robust enough to serve the diverse needs of thousands of learners, administrators, content builders and instructors simultaneously.
- Scalability: The infrastructure should be able to expand (or “scale”) to meet future growth, both in terms of the volume of instruction and the size of the student body.
- Usability: To support a lot of automated and personalized services, such as self-paced and role-specific learning, the access, delivery and presentation of material must be easy-to-use and highly intuitive—like surfing on the Web.
- Interoperability: To support content from different sources and multiple hardware/software solutions, the LMS should be based on open industry standards for Web deployments and support the major learning standards (AICC, SCORM, IMS and IEEE).
- Stability: The LMS infrastructure must reliably and effectively manage a large enterprise implementation running 24x7.
- Security: As any outward-facing collaborative solution, the LMS must selectively limit and control access to online content, resources and back-end functions, both internally and externally, for its diverse user community.

In a LMS (Learning Management System) an assessment engine with built-in testing and evaluation capabilities is critical to monitoring, tracking and rating e-learning initiatives. The system should support time limits for self-administered tests, limit the number of attempts

allowed and impose a time delay between attempts. By tracking the learning process, instructors can evaluate the effectiveness of the courses and accurately gauge the knowledge and skill levels. The word ‘accurately’ refers to the fact that e-learning methods have, besides all very well known advantages, one that is less obvious, namely these methods are more unbiased in respect to learners.

The assessment engine of the LMS has a high degree of complexity. In evaluating an LMS, it should also be taken a hard look at its developer. One way to test the system is to work with the system’s developer on a pilot program. You should be able to start at a size that is comfortable to you, with minimal commitment of finances or staff. You might consider leasing space on a developer’s e-learning system. This way, you can test a fully operational and market-proven system on a low-cost trial basis.

Reducing the cost of higher education is sometimes advanced as an objective of university e-learning strategies. Considerations of cost effectiveness were often secondary to the challenge of developing and delivering innovative programmes. The extent of this change in perception is difficult to assess, but it is clear at least that interest in measuring the cost, and assessing the cost-effectiveness, of e-learning is growing. An expectation that technology-based teaching would reduce the cost of education is not new. Many of the earlier modes of technology-based teaching were the subject of substantive empirical research; early studies of broadcast media, in particular, contributed greatly to the development of an effective methodology for their cost analysis [2]. Later, attention focused on methodological issues, on the institutional return on investment, and on the development of related guides and handbooks to assist universities in analysing costs. As in earlier studies, much depends on perspective; where account is taken of the cost of students' time, online learning is more likely to provide a cost-effective alternative to more traditional learning modalities. (It is hardly surprising, then, that so many e-learning programmes are aimed at the professional and business sectors and at students for whom time has a high opportunity cost, in occupations where employers are more likely to meet the cost of tuition.) Overall, observation of early programmes suggests that those that respond to the ascertained needs of potential students, that have due regard to students' preferences with respect to timing and mode of access, and that use technology in an appropriate (often low-tech) way, are more likely to prove cost-effective – and to survive; and that programmes that ignore considerations of this kind,

are less likely to do survive, even if exceptionally well endowed.

6 Conclusion

The education system in Romania has been subject to a series of reforms largely dictated by the political priorities of the party in power. No fewer than 15 major changes to the education system have been implemented by 13 ministers in the course of 20 years.

Decentralization is not an end in itself. It is part of the national strategy of decentralization and is intended to create an educational system organized, administered and financed by European rigors regarding the quality assurance in educational training process, unrestricted, equal of all in the educational activity, the adequacy of supply educational interests and needs of direct and indirect beneficiaries.

The effectiveness of decentralization should be included in value added in education, attested by the ability to integrate young graduates in society on the basis of professional skills acquired and by employment locally, nationally and internationally. Decentralization should not cause imbalances and distortions in organization, leadership and support national education system. This process will ensure a clear division, balanced and well defined power of decision between representative institutions of local and regional communities, on the one hand and the national level on the other.

Also, decentralization of decision involves the development of monitoring, control and evaluation, both by the local community and government institutions.

The success of decentralization is based mainly on the balance between authority and responsibility on the one hand and the capacity of human resources and information flows, on the other.

References

- [1] Butler Melanie, *Professional Development for Teachers Using Technology*, Recent Advances in Education and Educational Technology, Proceedings of the 7th WSEAS International Conference on Education and Educational Technology (EDU'08), Venice, Italy, 2008
- [2] Dumancic Mario, Zovco Vatroslav, Maletic Franjo, *Support for the Development of a Model for Lifelong Learning of Teachers in the Republic of Croatia Faculty of Teacher Education*, Recent Advances in Education and Educational Technology, Proceedings of the 8th WSEAS International Conference on Education and Educational Technology (EDU'09), University of Genova, Italy, 2009
- [3] Ministry of Education, Research and Youth. The workshop *Decentralising Education: Experience from other countries and its relevance for Romania*, Bucharest, 9 April, 2009
- [4] Miroiu, A., Rădoi, M. și Zulean, M., *Politici educationale*, București: Ed. Politeia - SNSPA, 2002.
- [5] Moon, B., Vlasceanu, L., Barrows, L.C. (Eds.), *Institutional approaches to teacher education within higher education in Europe: Current models and new developments*. Bucharest, UNESCOPEPES, 2003.
- [6] Neculau, A. (coord.). *Analiza și intervenția în grupuri și organizații*. Iași: Polirom, 2000.
- [7] Romanian Government, The Order of the Government no. 129/ 2000 regarding adults' professional training.
- [8] Romanian Government. *Methodological rules of applying the stipulations of the order of the Government. no. 129/2000 regarding adults' professional training*, Official Monitor of Romania, part 1, no 346/21.05.2003.
- [9] Sava, S. *Adults' education in Romania: Educational, cultural and social politics*. The volume of the first National Conference on Adults' Education, Timisoara, Banat Printing House, 2001.
- [10] Sava, S. and Matache, M., *A portrait of adults' education in Romania*, 2003.
<http://www.irea.uvt.ro/portreeng.doc>
- [11] Schifirnet C., *Changing Adults' Education*, Bucharest, Fiat Lux Printing House, 1997.