Vj g'Ceswktgo gpv'qh'c'Gwtqr gcp'F ko gpukqp'kp' Gf wecvkqp

P gy 'T qo cpkcp'Gf wecvkqpcn'Rqnlekgu0

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Abstract **- In a complex world, characterized by diversity and change, acquiring a European dimension in education answers the challenges of the open society. The paper describes the Romanian government's strategy to attempt this dimension in higher education. Attention is drawn to the technical universities in terms of the access to higher education and the transition to an educational system appropriate for a society based on individual freedom, political pluralism, and market economy. It is emphasized that in the context that is specific to Romania, where fighting marginalization, social and cultural discriminations is a process that has recently started, this orientation could offer compensatory solutions.**

Keywords – pedagogy, scientific research, globalization, polytechnic institutes, academic autonomy, university charter, reform, strategy, quality

I.   INTRODUCTION

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* and *anytime & anywhere learning*. Globalization creates a market of education services, with identical rules as in any other service market [1]. 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 loose 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 program.

A central unit provides support for a Web-based catalogue of online programs 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).

II.   AN INNOVATIVE PEDAGOGY

A key objective in developing the online program 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 program 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 program that was academically demanding, and responsive to

Academic documents drawn up on international level – according to subjects

Documente academice create la nivel mondial– după subiectul de studiu
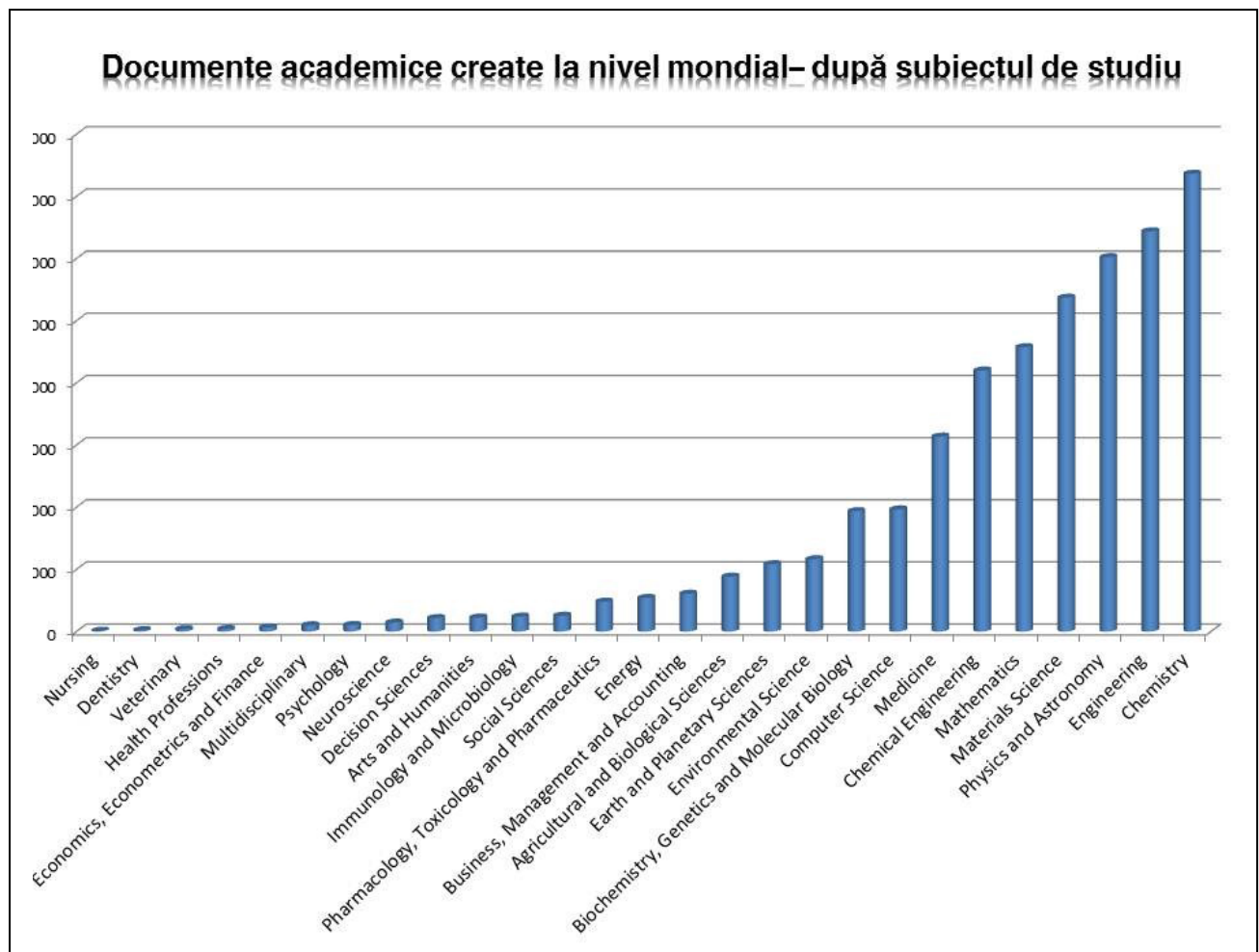
the challenges confronting managers in those companies competing in a global market. The pedagogical approach is based on a marked (even radical) departure from traditional practice, requiring considerable and ongoing participation and peer collaboration by students. Part of this activity requires students to address a continuing series of problem-focused 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 program is a core-activity for this group of academics. The faculty-led initiative involved considerable commitment by staff in initiating and developing the program 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 programs tend to develop strategies to minimize 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 disciplinal or sectoral 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).

III. BRIEF HISTORY OF ROMANIAN HIGHER EDUCATION

The first institutes of higher education that functioned in the territory of Romania were *Academia Vasiliana* (1640) founded by Prince Vasile Lupu in Iassy 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 where laid down.

The first Romanian universities were established by Prince Alexandru Ioan Cuza - the *University of Iassy* (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 organized 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 centers, 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 program, the number of students enrolled in various study program 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.

Since October 2006 university accreditation issues have dealt with 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.

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.

IV. SCIENTIFIC RESEARCH AND FINANCING

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 Ministry 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 (which has been called CNCS since 2012) 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 CNCS makes the connection between the university community and the Ministry of Education and Research representing the Government.

CNCS and CNFIS (*The National Council of Financing in Higher Education*) 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.

- GEEA – the multi-core resource centre of a high level of performance to support research, technological development and scientific innovation on the European level. The aim of GEEA platform is to increase the research capacity of universities and institutions through the creation of a local GRID centre of a high level of performance in order to enhance the level of scientific competitiveness on an international level. GRID centre has been created to support research, technological development and scientific innovation.

The platform contributes to the development of the national GRID system through the enrichment of the existent GRID resources, the improvement of their interconnections in order to ensure the quality of services at the network level and the achievement of applications necessary for accessibility, use, efficient control, insurance to fault tolerance and safety and last but not least for the development of complex applications of a high level of performance. The training component of the platform includes three main domains:

- The configuration of GRID communication infrastructure of a high level of performance;
- The use and development of middleware;
- The development of GRID innovative applications.

The configuration of GRID communication infrastructure
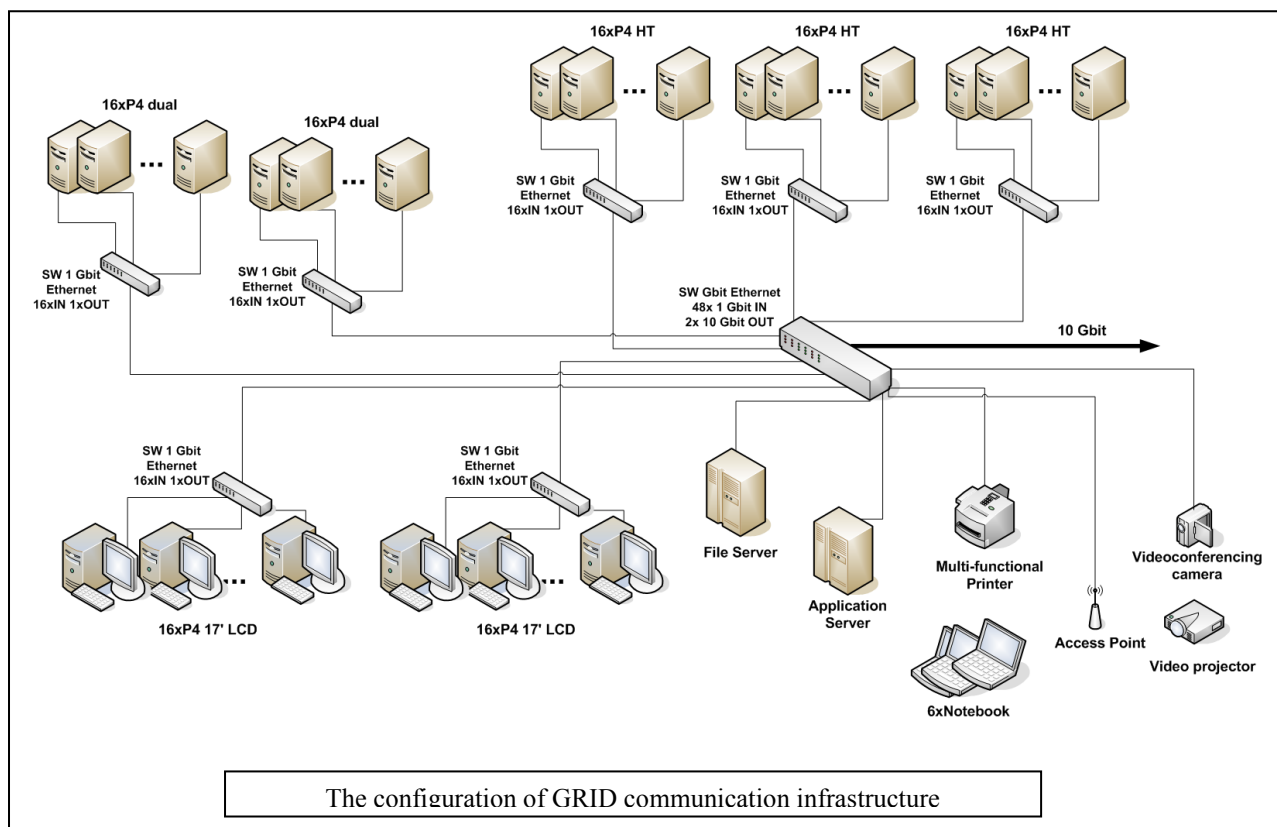
The state higher education sector in Romania comprises 56 state higher education institutions.

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

V. THE ACADEMIC AUTONOMY

Academic 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 [3].

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 [9].

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 [4].

The 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 programs, 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 [1].

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. This centre 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 10 other departments from UPB.

The highest part of the CTANM financing is realized 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 programs 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 SMEs
- Project Management
- Incubator Schemes; Knowledge Transfer; Technology Transfer and Research and Development
- Cooperation with Romanian enterprises including SMEs (bring Romanian SMEs in partnership or disseminate the results of projects in Romanian SMEs)
- 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.

VI. EXTERNAL FACTORS

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

The foundation for reform is the decentralization 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 program [5].

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 is 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.

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 programs. 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. 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 analyzing 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 programs 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 programs 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 programs that ignore considerations of this kind, are less likely to do survive, even if exceptionally well endowed.

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.

The 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. This book 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. 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.

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 [2]. 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 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.

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).

VII. AN EXPERIMENT ON THE QUALITY OF A LEARNING PROCESS

The statistic analysis of the students" level of knowledge in UPB at the course Introduction to Informatics. The results of 400 students at the exam are the following:

Marks	< 50	[50;55]	[55;60)	[60;55)	[65;70)
Nr.stud.	2	7	30	67	86
Marks	[70;75)	[75;80)	[80;85)	[85;90)	[90;100)
Nr.stud.	101	60	34	9	4

The null hypothesis H_0 is tested. H_0: the selection of 400 students belongs to a population with the normal distribution; H_1: the selection does not belong to a population with the normal distribution. The Chi-squared test is applied, which consists in the evaluation of the statistics [10]:

$$X^2 = \sum_{i=1}^{10} \frac{(n_i - n * p_i)^2}{n * p_i} \sim \chi^2(10 - 2 - 1).$$

where n_i is the number of the students with the marks in the interval $[x_i, x_{i+1})$,

$$p_i = P(x_i < X < x_{i+1}) = \Phi\left(\frac{x_{i+1} - \mu}{\sigma}\right) - \Phi\left(\frac{x_i - \mu}{\sigma}\right)$$

where Φ is the Laplace function. The estimations of the mean μ and of the variance σ^2 are $\bar{x} = \frac{1}{400} \sum_{i=1}^{10} n_i * x_i^* = 70.2$

and $s^2 = \frac{1}{339} \sum_{i=1}^{10} (n_i * x_i^* - \bar{x})^2 = 74,5526$, where

$x_i^* = (x_i + x_{i+1})/2$. The results of the Chi-squared test are:

Data	0-50	50-55	55-60	60-65	65-70
n_1	2	7	30	67	86
p_1	0.00962	0.02947	0.07952	0.15497	0.21735
$N * p_1$	3.8498	11.7878	31.8096	61.9145	86.9404
$n_i - np_i$	-1.8498	-4.7878	-1.8096	5.0855	0.9404
z_1	3.4218	22.9228	3.2748	25.8627	0.8844
y_1	0.8888	1.9446	0.1030	0.4177	0.0102
Data	70-75	75-80	80-85	85-90	90-100
n_1	101	60	34	9	4
p_1	0.22021	0.16097	0.08489	0.03229	0.01061
$N * p_1$	88.0830	64.3879	33.9561	12.9166	4.2435
$n_i - np_i$	12.9170	-4.3879	0.0439	-3.9166	-0.2435
z_1	166.849	19.2534	0.0019	16.3394	0.0593
y_1	1.8942	0.2990	0.0001	1.1876	0.0140

where $z_i = n_i - np_i$; $y_i = (n_i - np_i)^2 / np_i \Rightarrow$

$$X^2 = \sum_{i=1}^{10} \frac{(n_i - n * p_i)^2}{n * p_i} = 6,7591$$

By considering the error of type I $\alpha = 0,01 = P(X^2 > k \mid H_0 \text{ is true}) = 1 - F\chi^2(7)(k)$

one obtains $F\chi^2(7)(k) = 0,99 \Rightarrow k = 18,47$ hence $X^2 < k$ which implies that the Hypothesis H_0 is accepted, i.e. the selection belongs to a population with the normal distribution. This estimation can be used to determine the characteristics of the quality of the learning process at the level of the University.

VIII. CONCLUSION

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. 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.

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