

Institutional Innovation in Romanian Higher Education Environment

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Abstract

The article proposes the identification, in Romanian universities, of those elements that indicate the foundation of entrepreneurial universities. The analysis of some programmatic documents from their Internet sites has been accomplished (university charters, strategic plans, operational plans, scientific research strategies etc.) in order to mark the stage that different Romanian universities reached in their institutional innovation process. Among the identified institutional innovation signs, we can mention: research centres and labs; technological transfer centres; consulting centres; institutes created near universities; partnerships with private companies and public institutions; students involved in research; financing from economic agents; participation in international research networks; involvement in local development of the area where the university is placed.

Key words: *institutional innovation, university, research networks, local development, partnership*

JEL Classification: *D73, I23, O31*

Introduction

In the knowledge economy which values education and research primarily, the question that may occur is: to what extent the Romanian economy, implicitly Romanian higher education is developing aiming convergence with the EU within which the economy driven by knowledge plays a central role. Education, like any other institution, is a creation that is achieved – or it should be – according to a strategy. In this context, from a sociological perspective, our study deals with the institutional reconstruction process of higher education in our country (under the pressure of convergence with the EU recommendations). In our opinion (and other specialists') Romanian higher education is still in the discussion and clarification stage whose limit has already been exceeded by the EU. According to other specialists, there is a lack of assimilation of new concepts and themes related to education, both in general and in particular, by specialized institutional factors. That is why our study focuses on the current experiences at this level of change processes¹.

The article draws an analysis of the programmatic documents of strategic vision (university charters, strategic plans, operational plans, regulations and strategies for scientific research etc.),

¹ Glodeanu, I., Hoffman, O., Leovaridis, C., Nica, E., Nicolaescu, A., Popescu, G., Rașeev, S., *Noile paradigme ale inovării. Studii de caz – Universitatea corporativă*, Editura Expert, București, 2009, pp. 167-168.

to mark the stage reached by different Romanian universities in their institutional reconstruction; the study was conducted in early 2008 and is based on written material provided by the universities and found on their Internet sites. Our approach is a diagnosis based on the following question: to what extent the European concerns and strategies of institutional reconstruction with regard to higher education find their place in the universities of our country. Our research is not exhaustive, taking into account the presence of other documents and other universities that we have not considered, the criterion according to which we made the choice being the relevance of different documents that we could find for the problem that we proposed to clarify.

Among the signs of institutional innovation that we have identified, we mention: existence of laboratories and research centers; technology transfer centers; counseling centers; institutes created near the universities; partnerships with private companies; partnerships with public institutions; cooperation based on joint projects; students involved in research; sponsorship (funding) from the outside (e.g from businesses, foundations etc.); participation in international research networks; involvement in local development area where the university is located etc. Next, we provide a number of examples of such features of the entrepreneurial university representative for Romanian universities.

Different Types of Research Centers as Elements of Institutional Innovations

Research laboratories. Laboratories offer the possibility for innovation as a result of scientific research and experimentation in offices equipped with specialized equipment especially used by the teachers and students of that university. In most universities we have examined, the research activity is mainly conducted in their own Departments or units of scientific research (University „Dunărea de Jos” of Galați², University of Oradea³, „Babeș-Bolyai” University of Cluj⁴, University of Bucharest⁵, University Politehnica of Bucharest⁶ etc.).

Institutes of universities. In order to develop research in the universities, some of them founded their own institutes or research centers that promote the transfer of knowledge from theory to practice and support innovation. In 1994, at “Hyperion” University of Bucharest, for the development of scientific research, at Hyperion University Foundation level there was created the Hyperion Institute for Research and Development which comprises several departments, in close connection and interaction with the profiles of the faculties from Hyperion University of Bucharest⁷. “Vasile Goldiș” West University of Arad has established both “Goldiș Vasile” Institute for Studies and Research and the Center for Judaic Studies.

² Universitatea „Dunărea de Jos” Galați, *Carta Universității „Dunărea de Jos” Galați*, art. 20, alin. 1, available on the website <http://www.rectorat.ugal.ro> [accessed at 10.01.2008].

³ Universitatea din Oradea, *Carta Universității din Oradea*, art. 35, available on the website <http://info.uoradea.ro/topic/184.html> [accessed at 11.01.2008].

⁴ Universitatea „Babeș-Bolyai” Cluj, *Strategia cercetării în perioada 2005-2010*, p. 15, available on the website <http://cercetare.ubbcluj.ro/index.php?pagina=strategia&sidecol=coldr> [accessed at 12.01.2008].

⁵ Universitatea din București, *Carta Universității din București*, art. 12, 38, available on the website http://www.unibuc.ro/ro/carta_universitara [accessed at 15.01.2008].

⁶ Universitatea „Politehnica” din București, *Carta Universității „Politehnica” din București*, art. 42, 44, available on the website <http://www.pub.ro/romana/carta/index.html> [accessed at 01.02.2008].

⁷ Universitatea Hyperion București, *Despre noi*, available on the website <http://www.hyperion.ro/module/contact/> [accessed at 05.02.2008].

Research centers. Many universities under study organized their research centers (Petroleum and Gas University of Ploiești⁸, “Ion Mincu” University of Architecture and Urbanism Bucharest⁹, Academy of Economic Studies Bucharest¹⁰, Politehnica University of Bucharest¹¹ etc.). A relevant example is the “Dunarea de Jos” University of Galați¹², where there is the European Center of Excellence in Environmental Matters (labeled like this as a result of a rigorous competition organized by the EU) having as partners: foreign universities, regional and local government (city hall, prefecture, county council), central administration (Ministry of Waters and Environment Protection, Ministry for European Integration, Ministry for Education and Research), consultancy firms, state or private Romanian companies.

Consultancy centers. Some universities have established consultancy centers that provide business consulting, design, expertise, assessment etc. in the fields of competence of the faculties that have been established, transferring the results of scientific research to production: University of Oradea¹³, University of Bucharest¹⁴, University of Agricultural Sciences and Veterinary Medicine of Bucharest¹⁵ etc. The beneficiaries of these services offered by the teachers of the university (domain experts) are in particular local economic agents.

Technology transfer centers. In some of the universities, research centers / institutes become even centers of technology transfer, some operating as self-financing systems and intending to improve research through innovation with impact on the economic agents and the transfer of knowledge to economic practice. For the “Politehnica” University of Timisoara, one of the most important objectives is the creation of the Technology Transfer Center; this is a unit of a more complex institution called Center for Documentation, Technology Transfer and Continuing Education¹⁶. The Politehnica University of Bucharest (UPB) also has centers of consultancy, technology transfer, manufacturing and services, designed as “structures whereby the University provides paid services to third parties”¹⁷.

Business incubators, technology parks. Another factor in favor of technology transfer and innovation is the activity in the technology parks and business incubators. Universities are also involved in this process, by providing scientific assistance to the economic agents, which involves cooperation of the universities with research institutes and enterprises in the area.

The 2003-2007 strategic Plan of “Stefan cel Mare” University of Suceava mentions the foundation of “Technology Park SA Suceava, whose activity contributes to the development of

⁸ Universitatea Petrol-Gaze din Ploiești, *Centre de cercetare*, available on the website http://www.upg-ploiesti.ro/cercetare/cent_cerc.htm [accessed at 10.02.2008].

⁹ Universitatea de Arhitectură și Urbanism „Ion Mincu”, *Centre de Cercetare*, available on the website <http://www.iaim.ro/cercetare/> [accessed at 10.02.2008].

¹⁰ Academia de Studii Economice București, *Departamentul de Cercetări Economice. Centre de cercetare*, available on the website <http://www.dce.ase.ro/centre.php> [accessed at 05.02.2008].

¹¹ Universitatea Politehnica din București, *Centre de cercetare*, available on the website <http://www.upb.ro/index.php/ro/cercetare/structuri-de-cercetare/centre-de-cercetare> [accessed at 05.02.2008].

¹² Universitatea „Dunărea de Jos” Galați, *Misiunea Universității Dunărea de Jos*, available on the website <http://www.rectorat.ugal.ro> [accessed at 10.02.2008].

¹³ Universitatea din Oradea, *Carta Universității din Oradea*, art. 32, available on the website <http://info.uoradea.ro/topic/184.html> [accessed at 11.01.2008].

¹⁴ Universitatea din București, *Carta Universității din București*, art. 34, available on the website http://www.unibuc.ro/ro/carta_universitara [accessed at 15.01.2008].

¹⁵ Universitatea de Științe Agricole și Medicină Veterinară București, *Planul Strategic 2006*, available on the website <http://www.usab.ro/ro/plan2006.html> [accessed at 22.02.2008].

¹⁶ Universitatea Politehnica Timișoara, *Strategia pentru cercetarea științifică pe perioada 2007-2013*, art. 3.8., available on the website <http://www.upt.ro/cercetare/strategie.php> [accessed at 20.02.2008].

¹⁷ Universitatea „Politehnica” din București, *Carta Universității „Politehnica” din București*, art. 45, available on the website <http://www.pub.ro/romana/carta/index.html> [accessed at 01.02.2008].

scientific research by qualified scientific assistance, involving teachers in the technology transfer process, providing advice on economic, technological, environmental etc. domains”¹⁸. IT Business Incubator and Technology Transfer Center operates within “Politehnica” University Timișoara (UPT), the center having been set up by UPT in partnership with the City Council, County Council and German consulting firm GTZ¹⁹.

Other universities also suggest the creation of technological parks in collaboration with research institutes, enterprises and local authorities: the creation of a Technology University Park IT in Craiova, at the initiative of University of Craiova²⁰; establishing a scientific and technological park by the University “Ovidius” Constanța, in partnership with the Constanta Shipyard, Rompetrol, SC Oil Terminal SA, Petromar, Atomo-Electric Cernavoda Central etc.²¹

Research and Education Poles (REP). In order to promote the transfer of knowledge and technology, it is necessary to support the creation of research and education poles that group together universities, research institutions and enterprises. This is reflected in the Research Strategy at “Petru Maior” University of Targu-Mures, and in the Research Strategy at “Babes-Bolyai” University of Cluj (UBB).

Cooperation with Public and Private Institutions

Partnerships with private companies. University partnerships (with some private companies, public institutions, research institutes, other universities etc.) offer the possibility of collaboration between the university and these specialized and equipped units on a priority basis for scientific experimentations. In the strategic documents of most universities surveyed, we found interest in working with private businesses, especially to obtain extra funding, but also for an exchange of services for the benefit of both parties: at the University of Agricultural Sciences and Medicine Veterinary Bucharest, Faculty of Agriculture, they aim to diversify the base of practical training for university students by signing collaboration agreements with performant businesses in the agriculture and agrifood field²²; at “Ovidius” University Constanta, partnerships with economic and educational institutions, arts and culture mainly aim to ensure continuous professional preparation of the specialists in these institutions²³; “Politehnica” University of Timisoara proposes strengthening relations with already traditional partners (multinational private companies) and encourages R & D activities in collaboration with the innovative economic agents in areas of high technology (especially through the development of existing Software Incubator)²⁴.

Partnerships with public institutions. Setting partnerships with public institutions (national research institutes or the Romanian Academy ones, universities, local authorities etc.) represents an objective put into practice by a number of universities (Spiru Haret University of

¹⁸ Universitatea „Ștefan cel Mare” Suceava, *Planul strategic 2003-2007*, p. 20, available on the website http://www.usv.ro/pagini/acte_oficiale/ro/index.php?menu_st=2 [accessed at 20.3.2008].

¹⁹ Universitatea Politehnica Timișoara, *Strategia pentru cercetarea științifică pe perioada 2007-2013*, art. 3.9., available on the website <http://www.upt.ro/cercetare/strategie.php> [accessed at 20.02.2008].

²⁰ Universitatea din Craiova, *Planul operațional 2006*, p. 5, available on the website http://cis01.central.ucv.ro/manag_ac_ad/files/plan_operational_2006.pdf [accessed at 23.02.2008].

²¹ Universitatea Ovidius Constanța, *Prevederile planului operațional pentru anul 2007*, p. 3, available on the website <http://www.univ-ovidius.ro/despre-uoc/plan-operational-2007.php> [accessed at 25.02.2008].

²² Universitatea de Științe Agricole și Medicină Veterinară București, *Planul Strategic 2006*, available on the website <http://www.usab.ro/ro/plan2006.html> [accessed at 22.02.2008].

²³ Universitatea Ovidius Constanța, *Prevederile planului operațional pentru 2004-2008*, p. 9, available on the website <http://www.univ-ovidius.ro/despre-uoc/plan-operational-2004-2008.php> [accessed at 25.02.2008].

²⁴ Universitatea Politehnica Timișoara, *Planul Operațional*, available on the website <http://www.upt.ro/cercetare/strategie.php> [accessed at 24.02.2008].

Bucharest²⁵, “Alexandru Ioan Cuza” University in Iasi²⁶, “Vasile Goldiș” West University of Arad).

Cooperation based on joint projects and participation in international research networks. Most university partnerships are made in networks and consortia of cooperation based on joint projects. Among cooperation in the form of consortia and networks of cooperation (in which universities are mainly involved in fundamental research), international collaborations provide opportunities with partners outside the country who are leaders in that sector, and all partners benefit from the common shared knowledge in the network.

Cooperation between Romanian universities and the foreign ones consist in participation in international programs such as Socrates, Erasmus, Leonardo da Vinci, Tempus, Copernicus, FP6, Eureka (Petroleum and Gas University of Ploiesti²⁷, University of Craiova²⁸, Politehnica University of Bucharest²⁹, “Lucian Blaga” University in Sibiu³⁰, “Transilvania” University in Brasov³¹ etc.).

Development of Students’ Research Competences

Involving students in research. Human resources training prepared to carry out R&D activities requires students’ involvement in research conducted in university, by attracting them in various research laboratories, institutes etc. and by including them in research teams to complete the grants or other contracts.

In all universities whose documents we reviewed, emphasis is placed not only on research performed by teachers and researchers, but also on research performed by students, due to their material and spiritual co-interest (through research scholarships), in the research laboratories of the university or its partners in industry or research. Such universities are: „Dunărea de Jos” University of Galați³², Hyperion University of Bucharest³³, Politehnica University of Bucharest³⁴, Politehnica University of Timișoara³⁵, “Ștefan cel Mare” University of Suceava³⁶, Academy of Economic Studies Bucharest³⁷ etc.

²⁵ Universitatea Spiru Haret, *Strategia de optimizare a activității de cercetare și dezvoltare experimentală în Universitatea Spiru Haret*, p. 3, available on the website

<http://www.spiruharet.ro/CERCETARE/strategia.pdf> [accessed at 27.02.2008].

²⁶ Universitatea „Alexandru Ioan Cuza” Iași, *Extras din Planul strategic*, p. 4, available on the website <http://www.uaic.ro/uaic/bin/download/University/Documente/planstrategic.pdf> [accessed at 01.03.2008].

²⁷ Universitatea Petrol-Gaze din Ploiești, *Planul Strategic 2007-2013*, p. 33, available on the website http://www.upg-ploiesti.ro/plan_strat.html [accessed at 27.02.2008].

²⁸ Universitatea din Craiova, *Planul operațional 2006*, p. 2, available on the website http://cis01.central.ucv.ro/manag_ac_ad/files/plan_operational_2006.pdf [accessed at 23.02.2008].

²⁹ Universitatea Politehnica din București, *Acorduri bilaterale și convenții tripartite, Programe Comunitare*, available on the website <http://www.upb.ro/index.php/ro/cooperare-internationala/acorduri-bilaterale-si-conventii-tripartite> [accessed at 25.04.2008].

³⁰ Universitatea „Lucian Blaga” Sibiu, *Regulamentul activității de cercetare științifică*, available on the website <http://cercetar.ulbsibiu.ro> [accessed at 27.02.2008].

³¹ Universitatea Transilvania Brașov, *Planul Strategic pentru perioada 2004-2008*, available on the website <http://www.unitbv.ro/Portals/0/Carta%20si%20Regulamente/Planul%20strategic%202004%20-%202008.pdf> [accessed at 02.03.2008].

³² Universitatea „Dunărea de Jos” Galați, *Carta Universității „Dunărea de Jos” Galați*, art. 20, available on the website <http://www.rectorat.ugal.ro> [accessed at 10.01.2008].

³³ Universitatea Hyperion București, *Despre noi*, available on the website <http://www.hyperion.ro/module/contact/> [accessed at 05.02.2008].

³⁴ Universitatea „Politehnica” din București, *Carta Universității „Politehnica” din București*, art. 88, 100, available on the website <http://www.pub.ro/romana/carta/index.html> [accessed at 01.02.2008].

Courses in the curriculum useful for students to set up their own business and to stimulate their interest for R&D. Students' training and stimulation of their interest for research and innovation, but also for entrepreneurship (initiation of own business) take place also through the students' participation in courses on research and innovation, business management etc. In this context, our approach that aims to find out how many lectures of the kind are included in education plans of Romanian universities is justified.

For example, at "Lucian Blaga" University of Sibiu, Faculty of Engineering, we have identified a number of subjects that stimulate students' interest for research and innovation (Fundamentals of experimental research, Creativity and inventiveness, Creativity and Design) but also for setting up their own business (Small and medium businesses, Business risk).

At "Transilvania" University of Braşov, Faculty of Economics, the education plans list courses that may stimulate future graduates to set up their own business (Business plans and projects, Business management, Consumer behavior etc.) or to become interested in research and innovation (R & D Management). Faculty of Electrical Engineering and Information Technology at the University of Oradea offers its students in the last year of study the possibility to prepare in research and innovation field but also in the entrepreneurial one. It is relevant to mention the following courses: Invention, Policies and business strategies, Innovation and technology management and Research Management. At "Vasile Goldiş" University of Arad, at the Faculty of Economics we have identified a number of courses that teach students how to start their own business: Entrepreneurial culture, Projects management in business, Economy of research and products development.

Sponsorship (Funding) from the Outside (from Businesses, Foundations etc.)

Identifying and attracting sponsorship by universities aim firstly to supplement the university income with extra budgetary funding (with material co-interesting of researchers in universities) and secondly, to connect the university with its beneficiaries, for example in industry, able to finance and implement the results of the research in practice (the university becoming a true business partner which represents one of the entrepreneurial university specific features).

Considering that a technical university has to measure its research capacity according to the extent to which it is applied in economy, in Politehnica University of Timişoara³⁵ a growing emphasis will be placed on applied research, through direct contracts with beneficiaries in the industry, able to fund and implement research results. At Petroleum and Gas University of Ploieşti³⁶, "research funding is mainly drawn from research contracts with government bodies and with companies", and among the funding sources mentioned in the 2003-2007 Strategic Plan of "Stefan cel Mare" University of Suceava, there are also "a number of external sources, especially North-Eastern Development Agency, and contracts with economic agents". The same

³⁵ Universitatea Politehnica Timişoara, *Strategia pentru cercetarea ştiinţifică pe perioada 2007-2013*, art. 3.5., available on the website <http://www.upt.ro/cercetare/strategie.php> [accessed at 20.02.2008].

³⁶ Universitatea „Ştefan cel Mare” Suceava, *Planul strategic 2003-2007*, pp. 4, 8, available on the website http://www.usv.ro/pagini/acte_oficiale/ro/index.php?menu_st=2 [accessed at 20.03.2008].

³⁷ Academia de Studii Economice, *Regulamentul privind organizarea, funcţionarea şi finanţarea cercetării ştiinţifice*, art. 12, available on the website <http://www.dce.ase.ro/regulament.php> [accessed at 10.03.2008].

³⁸ Universitatea Politehnica Timişoara, *Strategia pentru cercetarea ştiinţifică pe perioada 2007-2013*, art. 3.1., 3.2., available on the website <http://www.upt.ro/cercetare/strategie.php> [accessed at 20.02.2008].

³⁹ Universitatea Petrol-Gaze din Ploieşti, *Planul Strategic 2007-2013*, p. 27, available on the website http://www.upg-ploiesti.ro/plan_strat.html [accessed at 27.02.2008].

idea of the necessity to attract extra budgetary funding for research is also included in strategic documents of Politehnica University of Bucharest⁴⁰, University of Oradea⁴¹ etc.

It is interesting to mention that in Article 13 of the Charter of “Dimitrie Cantemir” Christian University in Bucharest⁴² we have found one of the defining elements of a type of corporate university, namely the inclusion of persons outside the University, in some of the decision bodies. It states that in the Senate of Christian “Dimitrie Cantemir” University there are also national and international sponsors and representatives of institutions that cooperate with the University.

Involvement in Local Development of the Area where the University is Located

Another specific feature of the institutional university innovation (the transition towards corporate university) is represented by its involvement in the development of the area where it is located; it is about assuming social responsibilities of a corporate type (on issues related to social cohesion, health, environment, infrastructure etc.).

Among the elements we identified that contribute to creating the image of “Vasile Goldiș” Western University as entrepreneurial, business and community university (as it calls itself), we enumerate⁴³:

- development of local cultural heritage (redevelopment of Library from Macea Castle and Macea Botanical Garden on a scientific basis);
- local human capital development through “The Active School” Continuous Training Program for school managers and pre-university teachers.

The “Mission” of “Dunarea de Jos” University of Galati also proposes as a strategic goal on a long and medium term “strengthening ties with local socio-economic medium”: development of the Faculty of Ships is carried out “under an old tradition of unique specialization in the country, and closely related to the development of Galati city as a Danube port, and the Center for continuous education and technology transfer runs various programmes aimed at improving the specialists’ competences in the socio-economic and industrial medium of the city⁴⁴.

The 6th Strategic Objective (University development as a center of excellence in relation to economic, social medium and involvement in community life) of the Strategic Plan 2004-2008⁴⁵ of the Transylvania University of Brasov, aims towards: collaboration with the industrial parks from Braşov for the development of joint projects; creation of centers of consulting, assessment and audit that provide services to economic and social medium at regional level; collaboration with local authorities (Regional Development Agency, County Council etc.).

⁴⁰ Universitatea „Politehnica” din Bucureşti, *Carta Universităţii „Politehnica” din Bucureşti*, art. 23, available on the website <http://www.pub.ro/romana/carta/index.html> [accessed at 01.02.2008].

⁴¹ Universitatea din Oradea, *Planul strategic de dezvoltare 2004-2007*, available on the website <http://info.uoradea.ro/topic/177.html> [accessed at 19.03.2008].

⁴² Universitatea Creştină „Dimitrie Cantemir”, *Carta Universităţii Creştine „Dimitrie Cantemir”*, art. 13, available on the website <http://www.ucdc.ro/carta.html> [accessed at 22.03.2008].

⁴³ Universitatea de Vest „Vasile Goldiș” Arad, *Planul Managerial Strategic 2004-2008*, pp. 16, 19, available on the website <http://www.uvvg.ro/site/index.php?categoryid=67> [accessed at 25.03.2008].

⁴⁴ Universitatea „Dunărea de Jos” Galaţi, *Misiunea Universităţii Dunărea de Jos*, available on the website <http://www.rectorat.ugal.ro> [accessed at 10.02.2008].

⁴⁵ Universitatea Transilvania Braşov, *Planul Strategic pentru perioada 2004-2008*, available on the website <http://www.unitbv.ro/Portals/0/Carta%20si%20Regulamente/Planul%20strategic%202004%20-%202008.pdf> [accessed at 02.03.2008].

Students' Views on the Research of their Universities

Qualitative content analysis of strategic documents of the universities, available on their websites, was then continued with a survey which consisted in applying a questionnaire on a group of 345 students (of which 122 from the Academy of Economic Studies Bucharest - AES, 111 from "Dimitrie Cantemir" Christian University - DCCU and 111 of the Polytechnic University of Bucharest - PUB)⁴⁶. The questionnaire included questions that tried to identify whether there are (or not) any items that may entitle us to say that we face a new vision of students' training, with an emphasis on training in entrepreneurship and research and development, in the case of the students from the listed universities. Since the questionnaire was very complex and that the research is not completely included in our article, we refer only to some research findings concerning students' opinion on the preparatory work needed to set up a business and for research, development and innovation (activities representing some of the features of institutional innovation in the academic world).

As regards the prospects that students included in the research identify for the period immediately following completion of studies ("After graduation - bachelor, master - what would you like to do?"), there is an important distinction between AES and DCCU, on the one hand, and PUB, on the other. If most of the respondents from the first two universities would like to be hired as employees (53.3% of AES, 50.5% from DCCU), over half of PUB students (58.1%) want to start a business on their own.

Subsequently, to identify whether there is a match between student expectations and reality, in terms of this paper theme, students were asked to what extent the faculty should develop and develops the skills regarding:

- business management;
- creative-innovative activities;
- scientific research competence.

Overall, with regard to business management, those who stated that management competence development is achieved to a large extent represent only a quarter of those who considered it important to the same extent. There are very few students in all three faculties (an average of 1.7%) who think that training in management is not important at all. The greatest differences are found among PUB students, where only 6.2% consider that management training is achieved to a large extent, as compared to a 9 times higher percentage (56.3%) who consider training skills on business management matters to be very important. A significant difference is also observed among the students from AES (15.6% vs. 72.9%), and here expectations are high as well.

In terms of training for creative and innovative activities, we can also notice differences between students' interest and university "offer". For example, PUB students that consider such training is important to a large extent are 11.4 times more than those who think that the faculty develops these skills; the same case was noticed with AES students - about 7 times more, and students from DCCU almost 5 times more, with an average of the entire group of about 7 times. There are also many students (nearly one third both on each faculty and overall) who believe that such competences are not at all covered by university training. There are, however, a relatively high percentage of students (7.6%) who can not appreciate to what extent the skills related to innovative activity are necessary (or not) for their future career.

When asked "Have you been / are you involved in research activities in the faculty?", a large number of students included in the research stated that they had not been involved in research

⁴⁶ Glodeanu, I., Hoffman, O., Leovaridis, C., Nica, E., Nicolaescu, A., Popescu, G., Raşeev, S., *op.cit.*, pp. 216-261.

activities during faculty (69.2%), the percentage values between the three universities being similar (61.5% - AES, 73.9% - DCCU, 73.2% - PUB). Students, in smaller numbers, who state they have been involved in such activities, say that it happened only a few times (26.7%). An opinion question in close relationship with the previous one is "Do you think that your faculty stimulates students' interest in research and innovation?": a smaller percentage of students, but close to the previous question, believe that the faculty does not stimulate their interest in this activity at all (41.4%), only 9.3% considering that this takes place to a larger extent.

However, many young people are interested in taking part in a course to prepare them for this type of activities (20.1% are very interested, 4.4% declare themselves interested, 28.1% are less interested and 10.4% declare themselves totally disinterested).

Conclusions

As compared with the European process in which case there was a first stage of initial formulation of problems and answers until it was developed a coherent theory around the central concept of "entrepreneurial (corporate) university", the process in our country - as the available materials, taken from the websites of Romanian universities, show - is in its first stage, when partial features and particular changes appear, such as: partnerships with economic agents or local public institutions, cooperation with foreign partners through networks and consortia, creation of institutions with a clear productive character in the university structure (technology transfer centers, consultancy ones, institutes, laboratories) etc.

By analyzing the content of official documents of the various universities we did not intend to evaluate the institutions that have issued them (this would involve on-sight studies, which we did not accomplish), but our goal was to identify and describe aspects in the process of change of institutional behaviors in the Romanian universities, the transformation from institutions designed only to disseminate knowledge into multi-functional institutions (entrepreneurial universities).

In the document analysis, we noticed a series of experiences that evince some characteristics of entrepreneurial universities, but that have developed through spontaneous actions, through university initiatives (e.g. whereas "Vasile Goldiș" West University of Arad defines itself at present as "a community and entrepreneurial university", the Academy of Economic Studies of Bucharest aims to become such a university until 2014), and not through centralized strategies at national level.

We propose several coordinates that could help us to identify those universities that have corporate practices: the university voluntarily assumes certain social obligations (involvement in local development of the area); the university board comprises representatives of various socio-professional groups united by a legitimate interest (stakeholders) - teachers, university researchers, but also specialists from other units, individuals from the sphere of innovative production and knowledge, representatives of institutions that benefit from specialists trained in the university, donors, community and local government representatives, parents and students' representatives etc.; although the teaching activity remains the main function of the university, they also carry other types of activities - research, innovation, production, including student involvement in research (in laboratories and research centers, centers for technology transfer, consultancy centers, institutes created in addition to universities), thus becoming centers for the creation and dissemination of knowledge (also through participation in international research networks); cooperation with other institutions facilitates joint actions for the benefit of the entire community (partnerships with private firms, with public institutions, cooperation based on joint projects, funding from businesses, foundations etc.).

In this context, it is necessary for Romanian universities to attract certain funds to finance the teaching activities, to offer jobs to their students (or scholarships granted by economic agents during their studies, followed by employment contracts after graduation). The process could be urged and guided through the beneficial practice of cooperation within international networks, through which universities can receive the latest documentation and advanced tools for research, but may also create a new market for their products.

References

1. Academia de Studii Economice București, *Departamentul de Cercetări Economice. Centre de cercetare*, available on the website <http://www.dce.ase.ro/centre.php> [accessed at 05.02.2008].
2. Academia de Studii Economice, *Regulamentul privind organizarea, funcționarea și finanțarea cercetării științifice*, available on the website <http://www.dce.ase.ro/regulament.php> [accessed at 10.03.2008].
3. Glodeanu, I., Hoffman, O., Leovaridis, C., Nica, E., Nicolaescu, A., Popescu, G., Rașeev, S., *Noile paradigme ale inovării. Studii de caz – Universitatea corporativă*, Editura Expert, București, 2009.
4. Universitatea „Alexandru Ioan Cuza” Iași, *Extras din Planul strategic*, available on the website <http://www.uaic.ro/uaic/bin/download/University/Documente/planstrategic.pdf> [accessed at 01.03.2008].
5. Universitatea „Babeș-Bolyai” Cluj, *Strategia cercetării în pentru perioada 2005-2010*, available on the website <http://cercetare.ubbcluj.ro/index.php?pagina=strategia&sidecol=coldr> [accessed at 12.01.2008].
6. Universitatea Creștină „Dimitrie Cantemir”, *Carta Universității Creștine „Dimitrie Cantemir”*, available on the website <http://www.ucdc.ro/carta.html> [accessed at 22.03.2008].
7. Universitatea de Arhitectură și Urbanism „Ion Mincu”, *Centre de Cercetare*, available on the website <http://www.iaim.ro/cercetare/> [accessed at 10.02.2008].
8. Universitatea de Științe Agricole și Medicină Veterinară București, *Planul Strategic 2006*, available on the website <http://www.usab.ro/ro/plan2006.html> [accessed at 22.02.2008].
9. Universitatea de Vest „Vasile Goldiș” Arad, *Planul Managerial Strategic 2004-2008*, available on the website <http://www.uvvg.ro/site/index.php?categoryid=67> [accessed at 25.03.2008].
10. Universitatea din București, *Carta Universității din București*, available on the website http://www.unibuc.ro/ro/carta_universitara [accessed at 15.01.2008].
11. Universitatea din Craiova, *Planul operațional 2006*, available on the website http://cis01.central.ucv.ro/manag_ac_ad/files/plan_operational_2006.pdf [accessed at 23.02.2008].
12. Universitatea din Oradea, *Carta Universității din Oradea*, available on the website <http://info.uoradea.ro/topic/184.html> [accessed at 11.01.2008].
13. Universitatea din Oradea, *Planul strategic de dezvoltare 2004-2007*, available on the website <http://info.uoradea.ro/topic/177.html> [accessed at 19.03.2008].
14. Universitatea „Dunărea de Jos” Galați, *Carta Universității „Dunărea de Jos” Galați*, available on the website <http://www.rectorat.ugal.ro> [accessed at 10.01.2008].
15. Universitatea „Dunărea de Jos” Galați, *Misiunea Universității Dunărea de Jos*, available on the website <http://www.rectorat.ugal.ro> [accessed at 10.02.2008].
16. Universitatea Hyperion București, *Despre noi*, available on the website <http://www.hyperion.ro/module/contact/> [accessed at 05.02.2008].
17. Universitatea „Lucian Blaga” Sibiu, *Regulamentul activității de cercetare științifică*, available on the website <http://cercetar.ulbsibiu.ro> [accessed at 27.02.2008].
18. Universitatea Ovidius Constanța, *Prevederile planului operațional pentru anul 2007*, available on the website <http://www.univ-ovidius.ro/despre-uoc/plan-operational-2007.php> [accessed at 25.02.2008].
19. Universitatea Ovidius Constanța, *Prevederile planului operațional pentru 2004-2008*, available on the website <http://www.univ-ovidius.ro/despre-uoc/plan-operational-2004-2008.php> [accessed at 25.02.2008].
20. Universitatea Petrol-Gaze din Ploiești, *Centre de cercetare*, available on the website http://www.upg-ploiesti.ro/cercetare/cent_cerc.htm [accessed at 10.02.2008].
21. Universitatea Petrol-Gaze din Ploiești, *Planul Strategic 2007-2013*, available on the website http://www.upg-ploiesti.ro/plan_strat.html [accessed at 27.02.2008].

23. Universitatea Politehnica din București, *Carta Universității „Politehnica” din București*, available on the website <http://www.pub.ro/romana/carta/index.html> [accessed at 01.02.2008].
24. Universitatea Politehnica din București, *Centre de cercetare*, available on the website <http://www.upb.ro/index.php/ro/cercetare/structuri-de-cercetare/centre-de-cercetare> [accessed at 05.02.2008].
25. Universitatea Politehnica din București, *Acorduri bilaterale și convenții tripartite, Programe Comunitare*, available on the website <http://www.upb.ro/index.php/ro/cooperare-internationala/acorduri-bilaterale-si-conventii-tripartite> [accessed at 25.04.2008].
26. Universitatea Politehnica Timișoara, *Strategia pentru cercetarea științifică pe perioada 2007-2013*, available on the website <http://www.upt.ro/cercetare/strategie.php> [accessed at 20.02.2008].
27. Universitatea Politehnica Timișoara, *Planul Operațional*, available on the website <http://www.upt.ro/cercetare/strategie.php> [accessed at 24.02.2008].
28. Universitatea Spiru Haret, *Strategia de optimizare a activității de cercetare și dezvoltare experimentală în Universitatea Spiru Haret*, available on the website <http://www.spiruharet.ro/CERCETARE/strategia.pdf> [accessed at 27.02.2008].
29. Universitatea „Ștefan cel Mare” Suceava, *Planul strategic 2003-2007*, available on the website http://www.usv.ro/pagini/acte_oficiale/ro/index.php?menu_st=2 [accessed at 20.03.2008].
31. Universitatea Transilvania Brașov, *Planul Strategic pentru perioada 2004-2008*, available on the website
32. <http://www.unitbv.ro/Portals/0/Carta%20si%20Regulamente/Planul%20strategic%202004%20-%202008.pdf> [accessed at 02.03.2008].

Inovarea instituțională în mediul universitar românesc

Rezumat

Articolul își propune identificarea în universitățile românești a unor elemente care să indice constituirea unor universități antreprenoriale. S-a realizat o analiză a unor documente programatice aflate pe paginile de pe Internet ale acestora (carte universitare, planuri strategice, planuri operaționale, strategii privind cercetarea științifică etc.), pentru a marca etapa în care au ajuns diferite universități românești în procesul lor de inovare instituțională. Printre semnele inovării instituționale ce au fost identificate se numără: laboratoare și centre de cercetare; centre de transfer tehnologic; centre de consultanță; institute create pe lângă universități; parteneriate cu firme private și cu instituții publice; implicarea studenților în cercetare; finanțări de la agenți economici; participarea la rețele de cercetare internaționale; implicarea în dezvoltarea locală a zonei în care se află universitatea.