



Analysis of EU Models for University-Enterprise Cooperation

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1. Instead of introduction

In 2006, the European Commission published a Communication on “Delivering on the Modernisation Agenda for Universities: Education, Research and Innovation”. The Modernisation Agenda for universities is part of the Lisbon Strategy for Growth and Jobs. It highlighted the key role Universities will play in Europe’s future and in the successful transition to a knowledge-based economy and society. However, this crucial sector of the economy and of society needs in-depth restructuring and modernisation if Europe is not to lose out in the global competition in education, research and innovation.

The Communication suggested changes in nine areas as key to success:

- Break down the barriers around universities in Europe
- Ensure real autonomy and accountability for universities
- Provide incentives for structured partnerships with the business community
- Provide the right mix of skills and competencies for the labour market
- Reduce the funding gap and make funding work more effectively in education and research
- Enhance interdisciplinarity and transdisciplinarity
- Activate knowledge through interaction with society
- Reward excellence at the highest level
- Make the European Higher Education Area and the European Research Area more visible and attractive in the world.

The need for action in these nine areas is widely acknowledged by stakeholders and Member States, most recently in the Council Resolution of 23 November 2007. There remains however a clear challenge in the implementation of these measures.

One of the EU-level responses to the changing role of HEIs in the economy has been the establishment of the European University-Business Forum, intended to facilitate exchange of examples of good practice, to foster mutual learning and networking and to inspire further activities in the EU Member States. The Forum is the European Commission’s response to calls from the academic and business communities for regular and sustainable dialogue, exchange, sharing and mutual learning.

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Overall conclusions

The following overall conclusions are drawn from the University business forums (*First and Second University Business Forum, Brussels, February 2008 and 2009, Continuing Education, Brussels 30 June 2008, Curriculum Development, Tenerife, 30-31 October 2008, Knowledge Transfer, Brussels, 7 November 2008*).

At the policy level:

- University-Business Cooperation, linked to the higher skills agenda, can help lead Europe through the current economic crisis. The progress of University-Business Cooperation should not be impeded by short-term reactions in HE or businesses
- A major challenge for economic recovery will be the availability of a higher-skilled workforce especially in science, technology, engineering and mathematics (STEM)
- Innovation resulting from links between business and Higher Education should not be limited to science, technology, engineering and mathematics (STEM) – the arts and humanities also contribute to socio-economic development
- SMEs are an important area for development. University-Business Cooperation might benefit from an improved understanding of how better to link SMEs to universities and also from understanding the different nature of innovation in SMEs compared to big companies
- The role of the student in the transaction. University-Business Cooperation might benefit from further clarification and understanding of the role of the student in the process: whether as client, customer, partner, ‘product’, university junior staff member etc.

At the implementation level

- There is a need for dissemination of, and access to, examples of good practice and success stories in University-Business Cooperation, with a better understanding of the impact of success (what is specifically achieved, how is it measured etc.)
- It is important to be clear about the models and principles which underpin good practices in their specific contexts (the mechanisms; who is involved; in what legal/economic conditions etc.)
- There needs to be a change of mindset in many cases to facilitate the alignment of the different cultures of the business and university worlds
- There is a need to recognize the particular value of individuals and organisations as champions of change, and to provide relevant support measures for champions

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Aims of Lisbon strategy are also relevant for the Western Balkan Counties (WBC) which are expected to include it into their reform agendas. In the knowledge triangle of education, research and innovation, universities play a special role in promoting European standards in education and training. WBC have been already included in the main European processes within areas of education and vocational training, research and usage of ICT technologies, at national as well as regional level. These countries conduct reforms in accordance with Bologna and Copenhagen processes, they have signed regional cooperation documents, they participate partially or fully in community programmes or special programmes of EU in the area of education, research and technologies (TEMPUS, FP6, FP7, Youth, Erasmus Mundus, LLL i dr), as well as in the other forms of the regional cooperation, such as university and/or research networks of SEE: CEEUN, CEI UniNET, SEE-ERA.NET, ERI SEE etc.

Many WBC universities have not succeeded in making the transition from educational to research institutions and remain pure “colleges” of teaching. With the Bologna Process, this transition is required in order to harmonize with the European education area. TEMPUS funds are of respective size to support the modernization and restructuring of universities in WBCs. According to estimation of EU experts, links between University and industry must be strengthened in order to bridge the gap between business needs and university services in the area of education and research, to enable permanent transfer of knowledge, to increase financing of innovation. Therefore, it is essential to seek and unlock “technological brokers” – entities which deal with vocational education, research, transfer of knowledge and technologies, and boosting international cooperation.

During the proposal preparation, Consortium of the project has analyzed, in detail, numerous reviews and reports about current state, problems and needs of WBC in areas of education, research and innovation, as well as SME potential and their needs. The following summarizes only problems and needs which are relevant for WBC-VMnet project:

1. University-enterprise cooperation

- a) The lack of effective linkages between knowledge institutions (HE and R&D) and industry;
- b) Universities find it difficult to attract social partners;
- c) There is little awareness of the mutual benefits of cooperation with industry;
- d) Actual cooperation between university and industry takes place mainly with large companies;
- e) Despite of the fact that Universities consider SMEs to be the most relevant and interested partners, cooperation with them is not so active and long-term.

2. Higher education and training for SMEs

- a) Universities are focused on academic knowledge, insufficiently oriented towards professional practice and experience; there is lack of IT skills, entrepreneurial culture and customer focus;
- b) Employers are generally not involved in the definition of HE programmes;
- c) The rate at which individuals are engaged in lifelong learning is less than half of the EU25 average;
- d) State support for small business training is still limited to business startup, management and administration; there is little in-house or own-funded training effort within enterprises;
- e) Small business training needs analysis does not exist or is based on 'ad hoc' surveys only, without systematic collection of data;
- f) Quality assurance mechanisms for the training sector is significantly underdeveloped;
- g) The greater part of the region SME sector is unable to participate in training developments, for reasons of accessibility and costs.

3. Innovation and competitiveness of enterprises

- a) There is a low level of awareness of the concept of innovation and its role in economic growth and competitiveness among general public, policy-makers and many enterprises;
- b) Cooperation between universities and enterprises is generally at a very low level in terms of technology innovations and transfer; there are few support structures and platforms, and little dissemination of good practice for existing cooperation;
- c) Main barrier to the provision of services and trainings to enterprises and to more intensive knowledge and technology transfer is lack of finance.

2. WBC-VMnet project activities in this field

2.1 Analysis of the EU models for cooperation in the knowledge triangle

Apart from models of university-enterprise cooperation applying in UPD, ULJ, C3M and IPU, EU partners in Consortium, at least **20 models** from different universities and research institutions throughout Europe will be examined by project team staff (PC and EU partners). Each UNI and R&D partner, two individual experts, and REDASP will provide and analyze **at least 2 good practices** in University-enterprise cooperation (EU model) ...totally 20 analyzed EU models. Analysis of comprehensive collected material will be performed by all project partners. Conclusions will be good basis for development of new regional model of cooperation.

In the first phase, each Project Partner (PP) should conduct preliminary selection of 5-10 representative universities that will serve as examples of good practice of University-Enterprise cooperation, based on:

- Previous cooperation
- References
- University renown
- Browsing the Internet with key words (***University-Enterprise cooperation, International Office, Data Basis, Business start-up, Spin Off, Career Service, Knowledge Transfer, Innovation, Joint Research...***)

Based on contacts with university representatives (e-mail, telephone, appointment...), readiness of the university to participate in polling and collecting relevant data about UNI-ENT cooperation is to be estimated. To that effect, it is necessary to deliver Questionnaire, with a list of questions and subjects to answer, so as to gain insight in university's position in this area.

After preliminary contacts by the local project team, a final list of universities to be included in the analysis (**every PP at least 2 EU universities**) is to be determined. The selected EU universities will be contacted and called to name the contact person who will be involved data collection. Besides the answers to a list of questions within each of Questionnaire subjects, it is also necessary to give suggestions and initiatives related to possible future activities in the field of university-enterprise cooperation.

Based on collected data and Questionnaire processing, individual experts 1 and 2 will process study cases as examples of good practice, i.e. as models of successful University-enterprise cooperation.

2.2 Development, assessment and adoption of the new regional model of UNI-ENT cooperation

After the completion of EU models for university-enterprise cooperation, a detailed analysis of current situation in that field in all WBC countries will be undertaken, especially those implemented in Consortium of project. For that purpose, all the available information will be used, gathered from Academic and Research networks for SEE and WBC, Ministries of Education, Ministries of Science, Ministries of Economy, The Chamber of Commerce, Agencies for SME development, National Employment Agencies and all the other political and social partners who will take part in the analysis as well as in development of the new WBC model, its assessment and adoption. All the initiatives realised in the previous, similar projects, from TEMPUS, EAR, FP6 programmes etc, will be taken into consideration.

Based on comprehensive analysis of EU models of university-enterprise cooperation, intensive communication and interviews with academic and business community in the WBC region, as main stakeholders in the knowledge triangle, academic staff of the project partners and individual experts 1 and 2 will develop and assess the new regional model, during the first year of the project implementation. In addition, they will undertake all necessary measures and activities for its successful implementation in the region, including communication with policy makers, promotional, disseminating and raising awareness activities, networking key actors in the knowledge triangle, as well as the development of efficient and effective mechanisms for cooperation. The objective is to determine and recommend the means of the efficient and sustainable cooperation, and to animate the key factors in the knowledge triangle.

After the assessment of proposed model by the EU experts and policy-makers, the agreed model will be adopted. Finally, the publishing of report "The regional model for university-industry cooperation", is planned by October 2009. Detailed assessments of the model and its tuning will be carried out during the whole project period, through Case study - Benchmarking best practice. It is expected that in two-years validating and adjustment of the model, at the end of the project, a reliable and sustainable model of cooperation will be obtained, leading to strengthening the role of Universities in the economic development and employment growth in the WBC region.

Developed and tested new model for regional university-enterprise cooperation will be introduced in WBC academic and business community, during the project life span.

3. Features of University-Enterprise cooperation

Cooperation of universities and enterprises can be analysed from different aspects, depending on which joint activities both sides are included in, and the effect they have on the key features of their successful cooperation. Features that characterise university-enterprise cooperation are listed below. When preparing the list, project team took into account the experience on similar projects, recommended methodology and available reports¹.

1. A clear policy, mission and vision of university-enterprise cooperation
 - University references concerning university-enterprise cooperation
 - Strategic plans to implement the policy as to university-enterprise cooperation
 - Involvement of enterprises in the management, decision-making structures and bodies of the universities, on central and faculty level
2. Existence of functional structures/services for support, promotion and implementation of university-enterprise cooperation.
 - Career services centre
 - Mediation services in searching for and finding jobs, offer-demand databases
 - Enterprise support service
 - International office for further professional training of students abroad
 - Industrial liaison office
 - Marketing unit
3. Involvement of enterprises in upgrading and updating the curriculum
 - Curricular committees with representatives of universities and enterprises
 - University offering the trainings for enterprises
 - Centre for professional training and education
 - TNA analysis, skills deficit analysis
4. Transfer of knowledge and technologies, joint university-enterprise research
 - Joint research projects
 - Technology centres (university and companies)
 - PhD students in companies

¹ *Project Report: University-Enterprise Cooperation: building new challenges on past experience, Socrates Accompanying Measure project N° 130023-AM-06-EMC*

- Implementation of innovations in enterprises, based on R/D results of university
 - Research support services for company needs
 - Institute of applied research
5. Giving support to enterprise foundation and development of entrepreneurship
- Development of spin-offs and incubators
 - Courses on promotion of entrepreneurship
 - Student entrepreneurs/student enterprise
 - Mentoring and supporting young entrepreneurs/mentoring schemes
 - Entrepreneurship education and training initiatives
 - Small business projects and similar support activities
6. Mobility activities
- Student placements (national and international)
 - Teachers from industry
 - University teachers involved in companies' operation
 - Involvement in European networks
7. University Involvement in local and regional development
- Connection and cooperation with regional development agencies and chambers of commerce
 - Active involvement in regional development strategies
 - Involvement in regional development projects etc.

4. Questionnaire

A) Identification and contact data

Title	
First name	
Last name	
University/Institute name	
Address	
City	
ZIP/Postal code	
Country	
Phone	
Fax	
E-mail	
URL	

B) A clear policy, mission and vision of university in the field of university-enterprise cooperation

B1. Are there clearly defined university procedures concerning cooperation with enterprises, and are they incorporated in legal documents?

B2. Is there a strategic plan to implement the university-enterprise policy? If yes, give a concise description (max. ½ page).

B3. Are the enterprises involved in the management structures, decision-making structures and bodies of the universities (at university level, faculty level...)? If yes, name them and the number of their members.

B4. To what extent is the university-enterprise policy in coherence with national and regional development policies, European and international integrations? (max. ½ page)

B5. Is Continuing Education & Lifelong Learning present in university policy, mission and vision ? If yes, in what form? (max. 1 page)

C) Existence and functioning of university mechanisms and structures that present support to promotion and implementation of university-enterprise cooperation.

C1. Are there centres and services for support to cooperation: career service center, placement service, enterprise support service, industrial liaison service...? Describe the functioning of existent centres and services. (max. 1 page)

C2. Are there Database placements/job offers accessible to enterprises and students? If yes, give a concise description (max. 1/4 page)

C3. Describe the functioning of International office for international placements/careers. (max. ½ page)

C4. Is there marketing unit at the university? If yes, what are its organisation and activities?
(max. ½ page)

D) Involvement of enterprise representatives in upgrading and updating the curriculum

D1. Are the enterprise representatives involved in curricular committees?

D2. Are there developed entrepreneurship trainings at the university? If yes, what trainings are offered (max ½ page)?

D3. Is there Center for professional training and education? If yes, what are its activities and functioning? (max. ½ page)

D4. Are the TNA and skills deficit analyses carried out efficiently? How often and in what manner? (max ½ page)..

E) Transfer of knowledge and technologies, joint university-enterprise research

E1. How do you realise joint research projects? (max ½ page)

E2. Are there technology centres (parks) and institutes of applied research for support to enterprises? If yes, how are they organised? (max ½ page)

E3. Are the PhD students engaged in enterprises?

E4. To what extent are the results of R&D research applied as innovations in enterprises?

F) Giving support to enterprise foundation and development of entrepreneurship

F1. Do you support the foundation and development of spin-off companies and business incubators, and in what manner? (max ½ page)

F2. Are there courses on promotion of entrepreneurship? How are they organised? (max ½ page)

F3. Is there mentoring and support to student entrepreneurs in the creation of student enterprises?

F4. Do you participate in projects supporting SME sector?

G) Mobility activities

G1. How is student placement organised (at national and international level)? Is it included in the Curriculum? (max ½ page)

G2. Do you have teachers from industry?

G3. Are the university trainers involved in companies' operation as consultants or employee' trainers?

G4. Are you involved in European networks?

H) University Involvement in local and regional development

H1. Are you connected to and do you cooperate with regional development agencies and chambers of commerce?

H2. Are you actively involved in development of regional strategies?

H3. Are you involved in EU regional development projects?

I) Suggestions

I1. Do you have any suggestions or do you wish to run an initiative concerning the possible future university-enterprise cooperation?