

Studies on university business cooperation - The university business forum

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What is the University Business Forum?

- 2008 – University-Business Forum
- “provide a platform for structured dialogue between the stakeholders, exchange, discussion and sharing of good practice and mutual learning”
- Covers issues such as curriculum design, mobility, knowledge transfer, entrepreneurship, governance, continuing education and LLLs
- Technopolis has supported around 10 main and thematic forums since 2008
- Helped to write the Communication, Staff working paper and impact assessment in 2009

Studies to highlight

- 15 in depth institutional case studies on the mechanisms of the collaboration (2011)
- 12 case studies on education in the knowledge triangle (2012)
- A guiding framework for entrepreneurial universities (2012/13)

15 case studies in 2011

- Objective:
 - *To give diverse examples of types of university business cooperation*
 - *To highlight the different contexts in which universities work in Europe*
 - *To reflect on the patterns and themes emerging*
- This was not about choosing the best - although all the examples provided solid evidence of formal links between universities and business
- Very important in the European landscape – is the contextualization of approaches

Selection of case studies

- Geographic location
- Size of institution
- Types of university business cooperation top down, bottom up – some new innovation.
- Specific selection criteria:
 - *Curriculum development*
 - *Entrepreneurship education*
 - *Employability*
 - *Placements*
 - *CPD/LLL*
 - *Research/KT*

Typology of UBC in cases

Country	Name of university	Key features of UBC
Austria	Upper Austria University of Applied Sciences	Practice oriented teaching methods involving industry
Belgium	KU Leuven	Decentralised links at the departmental level
Czech Republic	Charles University	Formal KT, autonomy at faculty level
Denmark	Aalborg University	PBL approaches
Finland	University of Turku	Strategic role in regional development
France	University of Compiegne	Dedicated to UBC with compulsory placements in industry

Typology of UBC in case studies

Country	Name of university	Key features of UBC
Greece	NTUA	Formal research related
Hungary	Budapest Corvinus University	Multi level including strategic partnerships
Ireland	University of Limerick	Dedicated UBC with compulsory placements
Portugal	University of Porto	Entrepreneurship education
Romania	UBB Cluj-Napoca	Formal links with SMEs
Slovakia	Slovak University of Technology	Departmental level and placements
Spain	AUM	Industry sponsored chairs
Sweden	Uppsala – Baltic University Programme	Network of HEIS supporting regional development
UK	Surrey University	Focus on employability

Overall reflections

- Each case is very different. Therefore very difficult to compare and contrast but reflect the ways which universities approach university business cooperation and what it means to them
- Very difficult to judge the success of these approaches
- There is little evaluation done on these – even on models like Aalborg

Themes

- The variety of roles now expected of universities - triple helix, knowledge triangle. Modes of interdependence and interaction
- The cultural differences prevail:
 - *Mindset of teaching staff*
 - *Attitude to innovation*
 - *Balance of research and education*
 - *Lack of incentives*
- A duty towards employability of graduates
- Seeing many more formal compulsory approaches to students engaging with industry through placements

Local engagement

- Universities with strong vocational or technical provenance (Surrey, Slovakia, Limerick, Compiègne) tend to engage with local employers
- Student placements
- Involve SMEs as collaborators through placements
- Even across a wider range of diverse practices it is custom to have more formalised relationships

Types of businesses involved in collaboration

- Universities with strong TT and KT tend to work much more internationally (Limerick, Leuven, Madrid, Surrey)
- Charles university in Prague and NTUA work for the greater part with public organisations
- Real challenge is engaging with SMEs – but universities highlight the higher transaction costs

Patterns emerging

- Very strong level of regional development and the inclusion of HEIs in regional partnerships
- Although this is traditionally more focused on technology transfer, it is increasingly involving curriculum development, lifelong learning and employability measures.
- Particular cases:
 - *Turku – support and development for enterprises in the context of regional development.*
 - *Aalborg, networking and matchmaking across regional SMEs*

Education in the knowledge triangle

- This study aimed to explore how the integration of the three sides of the knowledge triangle takes place at different higher education institutions (HEI) in Europe, with a special focus on the **educational aspect**. The case studies reflect on a range of issues, including:
 - *How the integration happens effectively, helping both companies and Higher Education Institutions through the flow of knowledge?*
 - *How and why do universities work with companies and what are the key motivations and drivers for collaboration? How can this process be supported?*
 - *What are the main forms of interaction? Do organisations interact through a facilitator or through direct contacts?*
 - *What different feedback mechanisms are in place and how do they affect the work of the different organisations?*

Why focus on Education?

- Education is often perceived as the weakest link in the knowledge triangle – this study therefore attempts to highlight examples of best practice where education is an equal partner
- From the Council Conclusions
- **“for education to fulfil its role in the knowledge triangle, research and innovation objectives and outcomes need to feed back into education, with teaching and learning underpinned by a strong research base, and with teaching and learning environments developed and improved through greater incorporation of creative thinking and innovative attitudes and approaches”**

Why focus on Education?

- Most of the activity in the Member States to date has been associated with technology transfer, enterprise development and the necessary conditions for the translation of research into production, thus focusing on the research/industry link.
- There has been an increasing level of interest in entrepreneurship, but again through the medium of technology transfer, looking at spin-offs, start-ups and potential student enterprises.
- There is **a need for research and innovation objectives to feed back into education** with teaching and learning environments developed and improved through greater incorporation of creative thinking and innovative attitudes and approaches.

Why focus on education

- The concentration on technology transfer issues also means that the role of **social sciences and humanities** has not been given the same attention or recognition.
- Despite the interlinked nature of the relationships in the triangle, there is a **concentration on the diffusion of knowledge rather than a bidirectional flow**.
- Higher Education Institutions are **at the heart of the knowledge triangle** as they have always (not equally) been involved in research, education and innovation.
- They also **link into the wider community** with enormous potential for further engagement, exchange of knowledge and absorption of new ideas.

Study methodology - Selection of case studies

- The case studies were selected at the level of individual institutions taking into account a number of factors, including:
 - ***The focus of the initiative***
 - ***The degree of integration in the local economy***
 - ***The drivers behind the approach***
 - ***Diversity in the approach***
 - ***Geographical diversity***
 - ***Type of institution***
- The objective of the selection was to cover as wide a range of the different HEIs as possible
- Shortlist of 26 universities - 12 in depth case studies undertaken involving desk research and interviews

Cases selected

Name of the HEI (acronym used in the study)	Country
Aalto University (Aalto)	FI
Aarhus University (Aarhus)	DK
Chalmers University of Technology (Chalmers)	SE
École Polytechnique Fédérale de Lausanne (EPFL)	CH
Karlsruhe Institute of Technology (KIT)	DE
Mondragon University (MU)	ES
Umea University (Umea)	SE
Université Joseph Fourier, Grenoble (UJF)	FR
University of the Arts London (UAL)	UK
University of Trento (Trento)	IT
University College London (UCL)	UK
Zürcher Hochschule der Künste (ZHdK)	CH

Analysis – priority areas of action and challenges

Priorities	Challenges
<p>Developing more coherence between policies in the field of education, research and innovation</p> <p>Accelerating pedagogical reform (What is done?)</p> <p>Partnership between universities and business and other relevant stakeholders</p> <p>Measures to develop an innovation culture in universities (How is it done?)</p> <p>Creating incentives for universities to develop transferable knowledge</p> <p>New approaches to quality assessment</p> <p>Developing the EIT as a model for the future</p>	<p>Teaching (Delivery methods)</p> <p>Outreach</p> <p>Mobility</p> <p>Curriculum development (Content)</p> <p>Quality systems</p> <p>Links (Internal)</p> <p>Governance</p>

The case studies led to the identification of **6 success factors** that can play either as enabler or barriers in the integration of education in the knowledge triangle:

1. Governance and strategies
2. Focus on internal and external stakeholder development
3. Educational strategies
4. Internationalisation
5. Internal development
6. National/ regional context

Transferability of approach

	National / regional environment		University structure		Potential for transferability		
	National regulation / context	Regional embeddedness	Defining factors	Structure is result of recent mergers	Elements / broader approach	Nationally	Internationally
Aalto	H	H	H	Yes	Elements	M	M
Aarhus	H	L	H	Yes	Broader approach	H	H
Chalmers	L	L	H	No	Broader approach	H	H
EPFL	H	L	H	No	Elements	M	H
UJF	H	H	L	No	Elements	H	M
KIT	M	M	H	Yes	Broader approach	H	H
Mondragon	L	H	H	No	Examples	L	H
Trento	L	H	L	No	Examples	M	M
Umea	L	H	L	No	Broader approach	H	H
UAL	H	M	L	No	Broader approach	L	M
UCL	H	L	L	No	Elements	H	M
ZHdK	H	H	M	Yes	Elements	M	L

Main lessons learnt

- 1. Embedding the entrepreneurial culture throughout the HEI
- 2. Involving students as co creators of knowledge and part of the innovation system
- 3. Create rich learning environments for talent development
- 4. QA and recognition of new skills development
- 5. Taking the interdisciplinary approach
- 6. Developing academic talent
- 7. Internationalisation as a way of improving institutional practice
- 8. Implementation of flexible management models
- 9. Transforming working environments – widening access
- 10. Embedding evaluation and monitoring
- 11. Smart specialisation as a focus
- 12. Taking the longer term vision for change
- 13. Incentives and funding structures
- 14. Engaging with the national policy environment across areas of the knowledge triangle

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Thank you

technopolis |group| has offices in Amsterdam, Ankara, Brighton, Brussels, Frankfurt/Main, Paris, Stockholm, Tallinn and Vienna
