

European Universities:

global challenges and regional contexts

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'The Lisbon Agenda'

- EU in 2010: the most competitive and dynamic knowledge –based economy in the world
- a European area of research and innovation
- increase European R&D expenditure to 3 % of Union's GDP in 2010
- a European area of lifelong learning

EU-Summit, 27 March 2004, Brussels

- too little progress; processes too slow
- increase efforts to reach Lisbon targets
- 'high level group' to report November 1
- new Commission in November

The Role of European Universities?

- contribute to economic growth and innovation
- focus on social relevance of higher education and research for the knowledge society
- global challenges and regional contexts

The Role of European Universities?

global challenges:

- enhance the international competitiveness of European higher education
- create more focus and volume in European research

Enhance the international competitiveness of European higher education

- more comparability of higher education degrees and qualifications (the Bologna process)
- more transparency in the European higher education system
 - a European meta-accreditation agency?
 - a classification of European higher education institutions?

Create more focus and volume in European research

- integration of national research systems
- European level support mechanisms for individual teams' research projects ('individual grants'): competition for excellence
- European Research Council
- strengthen European research infrastructure
- increase research training efforts

The Role of European Universities?

the regional context:

- theoretical perspectives
- crucial variables
- institutional strategies

The Regional Role of European Universities

theoretical perspectives:

- innovation: result of external factors:
 - technology push
 - market pull
- innovation: result of systems dynamics:
 - endogenous growth theory
 - » knowledge application and social interaction
 - » technology and market

The Regional Role of European Universities

crucial variables:

- R&D capacity
 - Number of researchers
 - Quality and size of research infrastructure
 - Skills level of regional labour force

The Regional Role of European Universities

crucial variables:

- R&D accessibility
 - size of spill over effects (patents, spin offs)
 - number of graduates
 - level of communication of research results
 - number of consultancy contacts
 - number of spin-off companies
 - university-Industry interaction: joint ventures, facility sharing, joint facilities

The Regional Role of European Universities

institutional strategies:

- create R&D capacity
 - focus and volume
 - economic clustering
 - foster co-operation
 - portfolio analysis

The Regional Role of European Universities

institutional strategies:

- stimulate R&D accessibility
 - anchored in university policy
 - human capital provision
 - knowledge transfer
 - » people (training of students and staff)
 - » team sport
 - » successful instruments
 - » participation in (regional) infrastructures
 - entrepreneurial activities
 - » strategic partnerships
 - » sharing of resources
 - » IPR
 - » university holdings

Entrepreneurship & Entrepreneurship Stimulation at the UT (1)

- Stimulation of entrepreneurship among students:
 - Minor Entrepreneurship for business and non-business students
 - University Student Enterprises (USE): some 130 student-entrepreneurs on Campus; companies employ other students on a free lance basis (approx. 600 students are involved)

Entrepreneurship & Entrepreneurship Stimulation at the UT (2)

- Entrepreneurship stimulation among graduates:
 - Temporary Entrepreneurial Positions(TOP), since 1984 : 325 positions awarded, 275 companies created; average size: 6 employees
 - TOP companies created annually about some 300 new jobs in the region; indirect effect on jobs is about the same

Entrepreneurship & Entrepreneurship Stimulation at the UT (3)

- Research spin-outs:
 - Research institutes have the creation of spin-offs in their objectives; e.g. Mesa+ created the last 10 years about 15 “healthy” companies; Mesa+ created its own incubator
 - Holding company of the UT: all interests of UT in companies is transferred to UT Holding company
 - Facility Sharing: Mesa+ created the MFT, MicroSystems Foundary Twente

Entrepreneurship & Entrepreneurship Stimulation at the UT (4)

- UT investment in infrastructure for entrepreneurship:
 - Business & Technology Centre Twente (BTC-Twente) – incubator for high-tech companies
 - On Campus facilities for high-tech companies
 - Off Campus facilities for high-tech companies (Business & Science Park, Knowledge Park)

‘Knowledge has to flow from those who know things to those who make things. There are many forms these flows can take, from the lectures, philosophical societies, and encyclopedias of the eighteenth century to the community colleges and internet of the twenty-first. But the institutions that facilitate these flows have to exist.’

Joel Mokyr, The Gifts of Athena, historical origins of the knowledge economy,
2002, p. 291