Developing a Classification of Higher Education Institutions in Europe

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Overview:

- Context: knowledge production and knowledge utilisation in Europe
- Classifying higher education institutions
- A European classification system

Knowledge Production in Europe

- EU's R&D intensity vis-à-vis US and Japan is stagnating (EU 1.93% GDP; US 2.59%; Japan 3.15%; China 1.31%)
- The 3% research intensity target only met in Sweden (4.27%) and Finland (3.5%)
- Soon China will spend same percentage GDP as the EU (prediction: 2.2% in 2010)
- Number of researchers per 1,000 labour force in EU is lagging behind (EU 5.4; US 9.0; Japan 10.1)

Knowledge Production in Europe (2)

- EU's investments in higher education are limited (EU 1.28% GDP; US 3.25%)
- Proportion of Nobel Prize winners in EU is declining (1901–1950: 73%; 1951-2000: 33%; 1995-2004: 19%)

Knowledge Utilisation in Europe

- EU's share in registered triadic patents is small (EU 12%; US 52%; Japan 35%)
- EU universities hardly have patents (EU 0.10 per 100,000 population; US 2.02; China 0.50)
- European interfaces industry/academia are weak (hardly any open innovation)
- European academic incentive schemes primarily based on publications

Knowledge Utilisation in Europe (2)

- Knowledge transfer of EU universities under-developed and fragmented (primarily regional; no patent pools)
- Venture capital lacking in pre-seed phase

Better Knowledge Production in Europe

- Hold on to 3% GDP target for R&D expenditure
- Accept 2% GDP target for higher education expenditure
- Stimulate private investments in higher education and R&D
- Develop ‘typology’ of European universities (diversity of university profiles)

Better Knowledge Production in Europe (2)

- Increase competition between universities with similar missions; stimulate multiple ranking
- Concentrate R&D funding in limited number of European ‘research universities’
- Develop European Research Council (ERC)
- Increase number of researchers in private sector

Better Knowledge Utilisation in Europe

- A European ‘Bayh-Dole Act’: make ‘research universities’ patent research results and license to business & industry (especially SMEs)
- Harmonise European IPR-systems and ensure legal certainty
- Create European Community Patent
- Professionalize knowledge transfer in European ‘research universities’ (introduce patent pooling)

Better Knowledge Utilisation in Europe (2)

- Develop European Institute of Technology (EIT) with a strong emphasis on technology transfer
- Stimulate clusters/innovation poles of industry & academia, especially joint facilities and infra-structure (incubators, accelerators, joint research labs)
- Encourage incentives in European universities for exploitation of research results

Classifying Higher Education Institutions

- 1973: Carnegie Classification (US) developed as a sampling device in higher education research
- 1976: five categories (doctoral granting u's, comprehensive u's and colleges, liberal arts colleges, two-year colleges, professional schools and other specialised institutions)
- 1994: ten categories, based on four criteria (research and teaching objectives, degrees offered, size, comprehensiveness)
- 2006: new classification developed: multiple dimensions

Classifying Higher Education Institutions

- UK typologies: six to seven categories (Oxford and Cambridge, London, ‘old civics’, ‘redbricks’, ‘greenfields’, technological u’s, ‘new’ u’s) (Tight, 1988; Scott, 2001)
- Both stability and (some) dynamics during post-binary period

Classifying Higher Education Institutions

- Tool for research
- Transparency instrument (various stakeholders)
- Base for governmental policy-making
- Instrument for university profiling
- *Used* for ranking

Classifying Higher Education Institutions methodological issues:

- A priori or a posteriori classification?
- Mono or multi dimensional?
- Hierarchical or non hierarchical?
- Reliability of data (subjective or objective)?
- Eligibility of institutions (relationship with accreditation and quality assurance)?

A European Classification System the first phase (2004-2005):

- A stakeholders approach
- Exploration and iterative discussions
- Result: a set of schemes as a basis for a classification

A European Classification System basic principles:

- Inclusive for all European higher education institutions
- A tool for developing institutional profiles
- Multi-dimensional and flexible
- Not prescriptive or rigid
- Ownership to rest with higher education institutions

A European Classification System design principles:

- A posteriori
- Multi dimensional
- Non hierarchical
- Objective and judgmental data
- Related to European Register of Quality Assurance Agencies

A European Classification System the schemes:

Education

- Types of degrees offered
- Range of subjects offered
- Orientation of degrees
- European educational profile

A European Classification System the schemes:

Research and Innovation

- Research intensiveness
- Innovation intensiveness
- European research profile

Student and Staff Profile

- International orientation
- Involvement in life long learning

A European Classification System the schemes:

Institutional Characteristics

- Size
- Mode of delivery
- Community services
- Public/private character
- Legal status

A European Classification System the schemes:

- Each scheme offers a description of certain characteristics
- Each characteristic is described by one or more indicators
- Each indicator consists of several categories

A European Classification System the next phase:

- Testing the schemes
- Enhancing the legitimacy of a classification
- Drafting a classification

A European Classification System the next phase:

- Analysing existing European data sources
- Surveying one hundred European higher education institutions
- In-depth-case studies
- Stakeholders meetings
- International consultations
- Conferences
- Drafting the classification

A European Classification System the result

An internationally applicable, multi dimensional, inclusive, descriptive and reliable tool:

- That makes the diversity of European higher education transparent
- That offers relevant information to stakeholders
- That allows for institutional profiling and strategy development
- And that can contribute to the international competitiveness of European higher education in knowledge production and knowledge utilisation