

OECD: Globally Competitive, Locally Engaged

Higher Education and Regions

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SHIFT TO THE KNOWLEDGE ECONOMY

Universities provide:

- knowledge (research)
- skills (learning and teaching)

Both contribute to regional economic competitiveness by raising productivity and promoting growth.

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INFLUENCE OF REGION ON UNIVERSITIES

- Quality of life for students and staff
- Supports 'brand' of University (assists recruitment and retention)
- External support may strengthen teaching and research

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INFLUENCE OF UNIVERSITIES ON REGIONS

- Innovation
- Social inclusion
- Inward investment
- Indigenous growth

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CLUSTERS

- Silicon Valley, Boston Beltline, Cambridge, etc
- Economic development is:
 - bottom-up process
 - collaborative
 - multi-level collaboration across public/private sectors
 - informal, as well as formal, interaction

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DIRECT ECONOMIC IMPACT OF UNIVERSITIES

- Employment
- Purchasing power
- Property developer (eg inner cities, science parks)
- Regional skills development
- Network builder/broker
- Research and knowledge transfer

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DIRECT CULTURAL IMPACTS OF UNIVERSITIES

- Learning and Teaching
- Cultural innovation and creativity
- Civil society
- Civilising influences
- Quality of life

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THE 'THIRD LEG'

- Teaching
- Research
- KNOWLEDGE TRANSFER

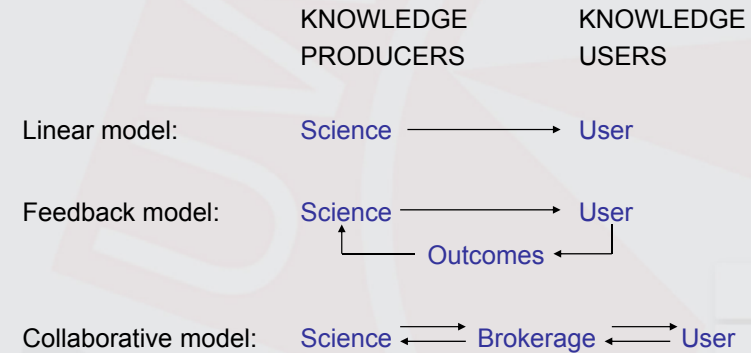
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Technology transfer and the linear model

- Basic → Strategic → Applied
- Science → Technology → Product

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The plot unravels



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From technology transfer to knowledge transfer

- Not all forms of knowledge are embodied in new technologies
- The role of the creative industries
- The rise of the service sector

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Knowledge transfer challenges

Incentives	- developing incentives for researchers to engage in relevant research
Time	- mediating time frames of knowledge production and decision-making
Culture	- developing appreciation of differences in work cultures
Expectations	- managing expectations of users and producers
Complexity	- dealing with inconclusive evidence, uncertainty or complexity
Communications	- ensuring effective synthesis and communication of knowledge
Resources	- sourcing finances, skills and capacity
Impacts	- developing mechanisms and measures to assess outcome

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Knowledge brokers

- Act as intermediaries, matching specialised knowledge production and specialised user needs
- Multiple forms
 - Knowledge transfer professional (e.g. University-industry liaison)
 - Evidence hubs (e.g. Defra Rural Evidence Research Centre)
 - Business advisers, field specialists (e.g. farm advisers, vets...)
 - Land management professionals (e.g. land agents, RICs...)
 - Knowledge transfer consultancies (e.g. ADAS)
 - Technology transfer companies (e.g. FAST Ltd)
 - Knowledge networks (e.g. Northern Rural Network)
 - Skills development agencies (e.g. Lantra)
 - Individual knowledge users and researchers

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Defining Knowledge Transfer

- Co-operation in education and training
- People and knowledge flow
- Collaborative research and users
- Commercialisation of R&D

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From knowledge transfer to knowledge exchange

- The Lambert Report
- Technology transfer as a 'people problem'
- Knowledge exchange: a new agenda

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Knowledge exchange and higher education policy

- From a marginal to a core activity
- Incentives – lack of
- Not a solution for the core funding problems of universities

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Balanced, pragmatic strategy

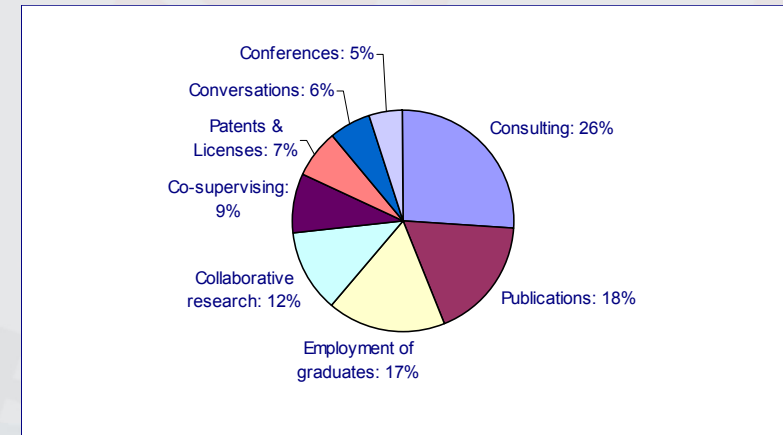
- Patents and licenses minor part of most universities' tech transfer (long-term opportunity)
- US benchmark is only 1 spin-off per £50m of external research income: UK best practice is 1 per £5m of research income
 - Other knowledge channels 2-3 times as important in terms of impact:
 - Consulting, publications, 'entrepreneurial' graduate recruitment, CPD, research collaboration

Source: Hughes, A (2003) 'Knowledge Transfer, Entrepreneurship and Economic Growth: Some Reflections and Policy Implications' in *Entrepreneurship in the Netherlands: Knowledge Transfer developing high tech ventures EIM Business Policy and Dutch Ministry of Economic Affairs. The Hague*

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Knowledge Transfer Channels at MIT

(Source: Agrawal and Henderson, 'Putting Patents in Context', *Management Science*, Jan 2002)



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MIT KT portfolio

- Consultancy (26%)
- Collaborative research (12%)
- Publications (18%)
- Employment of graduates (17%)
- Co-supervising (9%)
- Patents & Licenses (7%)

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Knowledge exchange as core mission

- From separation to engagement
- Institutional positioning in the emerging HE market place
- A third way? (!)

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Thank you for listening!

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