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.

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

INFLUENCE OF UNIVERSITIES ON REGIONS
- Innovation
- Social inclusion
- Inward investment
- Indigenous growth
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

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

DIRECT CULTURAL IMPACTS OF UNIVERSITIES

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

THE ‘THIRD LEG’

- Teaching
- Research
- KNOWLEDGE TRANSFER
Technology transfer and the linear model

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

The plot unravels

<table>
<thead>
<tr>
<th>KNOWLEDGE PRODUCERS</th>
<th>KNOWLEDGE USERS</th>
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<td>Linear model: Science → User</td>
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<td>Feedback model: Science → User</td>
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<tr>
<td>Collaborative model: Science → Brokerage → User</td>
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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

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 |
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, filed 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

Defining Knowledge Transfer

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

From knowledge transfer to knowledge exchange

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

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
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


Knowledge Transfer Channels at MIT

MIT KT portfolio

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

Knowledge exchange as core mission

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