The role of the university in the development of its region

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Outline

• The potential role of universities in regional development
  “the promise”

• Some of the mechanisms that can be used
  “the possible”

• Barriers and challenges
  “the practice”

• A proposed approach – the ‘Civic University’
  “the pitch”
INTRODUCTION TO US AND OUR WORK
Who we are

Newcastle University

Established in 1834. Research intensive, Russell Group university. Strong civic roots. City centre campus. Aims to be “globally competitive, locally engaged”

Centre for Urban and Regional Development Studies (CURDS)

Established in 1977. Worldwide reputation as a centre of excellence for the study of local and regional economic development. Over £30m generated through research grants and policy research for regional and national governments, EU, OECD etc.

Civic University Study Programme

Sponsored by the VC strategic fund. This programme of work seeks to link two separate knowledge domains – city and regional development and the leadership and management of higher education
Context

- Debate about the role and purpose of higher education in contemporary society in response to the question: *What are universities for*?

- At least two distinct research and related policy communities
  1. Universities as institutions within their own internal logic
  2. Societal expectations of universities – e.g. health, culture, business support, city and regional development
Source materials (unless otherwise acknowledged)


(Or just Google ‘connecting universities to regional growth’!)
Source materials (unless otherwise acknowledged)

The Civic University: Connecting the Global and the Local in Universities, Cities and Regions Loci for Knowledge and Innovation Creation
Source materials (unless otherwise acknowledged)

Published 25th January 2013

This book is based on original research into the experience of the UK and selected English provincial cities, with a focus on the role of universities in addressing the challenges of environmental sustainability, health and cultural development.

The case studies are set in the context of reviews of the international evidence on the links between universities and the urban economy, their role in ‘place making’ and in the local community.
Leading and Managing the ‘Civic University’
An international comparative study

To Be Published January 2014

An edited volume of case studies of 8 eight institutions in four European countries

The focus will be on the ‘what’ and ‘how’ of civic engagement, particularly the vision and mission, leadership, management and governance, organisation, financial and human resource policies and practises required to mobilise the academic community to meet the needs of the wider society locally, nationally and globally.
THE POTENTIAL ROLE OF UNIVERSITIES IN REGIONAL DEVELOPMENT
Contributing to innovation and economic development

- Multi-faceted functions of the university as an educational and cultural institution not just a knowledge producer (Charles 2008)

- Joining up direct commodification of knowledge via spin outs etc. with human capital upgrades in the urban labour market and social capital that builds trust and co-operative norms in local economic governance networks

- The developmental as well as generative role of universities (Gunasekara 2006)

- University influence on the city based political, institutional and network factors that shape innovation processes beyond input of knowledge capital (Benneworth et. al 2009)
Seen by European policy makers as KEY actors in supporting growth and jobs

• ‘In assessing the role of HEIs in the region it is useful to identify the steps needed to create a ‘connected region’ in which the institutions are key players. Through this connection process institutions become key partners for regional authorities in formulating and implementing their smart specialisation strategies’

• ‘They can contribute to a region’s assessment of its knowledge assets, capabilities and competencies, including those embedded in the institution’s own departments as well as local businesses, with a view to identifying the most promising areas of specialisation for the region, but also the weaknesses that hamper innovation’

Source: ‘An agenda for modernisation of Europe’s higher education system’ European Commission COM (2011) (567)
The HE Knowledge Exchange System in the US

• “There has been a distinct change of approach away from the assumption that KE is a uni-directional flow of knowledge from the university towards the user and from a highly transactional approach towards a collaborative approach in which the user is seen as a partner rather than simply a customer”

• “Most if not all universities (in the study) recognise the role of the university in supporting state wide economic and community development: support for small firm start ups and growth, business advisory services, entrepreneurship education, extension and continuing education that attempts to reach far and wide in the state; and public engagement activities that are typically but not exclusively located around the university” (Centre for Business Research, University of Cambridge)
SOME OF THE MECHANISMS THAT CAN BE USED
The mechanisms by which universities can and do contribute to development and growth

4 Key Areas;

- Enhancing innovation through their research activities
- Promoting enterprise, business development and growth
- Contributing to the development of human capital and skills
- Improving social equality through regeneration and cultural development
When exploring mechanisms for intervention we need to make a distinction between the impact of ‘normal’ university activity (financed as part of the core business of teaching and research) and ‘purposive’ interventions (initially funded from a source outside higher education and then ideally ‘mainstreamed’.)

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<th>‘Transactional’ services</th>
<th>Transformational activities</th>
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<tr>
<td><strong>Type of need / demand</strong></td>
<td>stated need or demand</td>
<td>latent or unstated needs</td>
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<td><strong>Type of approach</strong></td>
<td>output driven approach</td>
<td>outcome driven approach</td>
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<td><strong>Type of objectives</strong></td>
<td>clear objectives</td>
<td>less explicit objectives</td>
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<tr>
<td><strong>Link to time</strong></td>
<td>usually time bound</td>
<td>less clear timelines</td>
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Research and Innovation

- Consultancy services
- Innovation vouchers
- Knowledge transfer partnerships
- Science parks
- Research and technology centres

Nature of the intervention:
- Transactional, high volume
- Transformational, unique or rare

Complexity:
- High
- Low
Human Capital Development

- Transactional, high volume
- Workforce development
- Increasing mobility of staff and students
- Talent attraction and retention

Nature of the intervention:
- Transformational, unique or rare
Increasing complexity = increased barriers and challenges to success

Supply and Demand side barriers which limit the mobilisation of the university’s resources

High/many

Effective mobilisation of human, intellectual, social and physical capital

Collective agreement on the challenges and how to overcome them

Strategies and programmes

Projects and specific interventions

Vast, tried and tested

Limited, novel

Experience and competence
BARRIERS AND CHALLENGES
Universities are a critical ‘asset’ of the country and region; even more so in less favoured regions ....but

- Universities have often been absent from or had a minimal role in national or regional innovation strategies

- Technology push or linear model has dominated - potential contribution of the Arts, Humanities and Social Sciences to societal innovation and the quadruple helix of universities, business, government and civil society has been ignored

- The principles underlying why universities can be important agents in economic development have not been well understood by regional public authorities

- While a range of mechanisms have been used with varying success, they have generally not been coordinated strategically to produce the maximum impact.

- The range of barriers and challenges, both internal to the universities and in the wider enabling environment, have been under problematised by policy makers and largely under addressed by universities
National vs. Regional Policy Making

- Lack of a territorial dimension to HE policy
- HE meeting national/international research and education aspirations
- Uncoordinated HE, S&T and territorial policy at national level
- HEIs reinforcing hierarchies of regions (e.g. link between city status and citations)
- Neglect of the role of teaching and learning in knowledge transfer and human capital development
- Barriers between levels in HE (e.g. vocational and non vocational HEIs)
What is the interaction between national and regional policy making?

Nationally driven

Science and Innovation
Higher Education
Economic development
Employment and skills
Transport and infrastructure
Planning and regeneration

Locally driven

Impacted by international policies and drivers

Local and regional economic development

Impacted by local policies and drivers
Global excellence vs. regional needs/opportunities? the European Challenge

- Award through open competition of Framework Programme grants to *individual* teams with the expectation of peer reviewed academic *output*
- *Allocation* of European Structural Funds to *institutions* with the expectation of the *outcome* of enhanced regional growth
- Can Smart Specialisation encourage a convergence of these divergent approaches?
- Societal challenge themes such as sustainable development in Horizon 2020 (which have local as well as global dimensions) and the region as a ‘living lab’ as a means of linking high level scientific objectives and regional needs/opportunities (i.e. connecting top down and bottom up) through user inspired basic research
Smart specialisation: Points of Departure

• Moving a way from a ‘one size fits all’ approach to regional innovation based around a science and technology ‘push’ model
• Only a few regions can create ‘high tech’ clusters based on the exploitation of science excellence in such areas as biotechnology
• Avoiding equating research excellence with the ability of a regional economy to generate innovation
• Taking account of specific strengths (and weaknesses) of the region in terms of: industrial and business profile; all knowledge institutions; innovation potential (and challenges); national and international linkages
• Recognising the importance of non-university factors supporting (or inhibiting) entrepreneurship and industrial development (business finance, human capital, supportive public governance)
The challenge for universities and regions

- The link to actual or potential industrial capabilities requires a more selective (smarter) match with the research capabilities of all HEIs in the region.
- These industrial capabilities may not correspond with principal areas of scientific strength in the leading universities.
- BUT this is not necessarily a case for matching research fields to the current industrial profile - this could lead to ‘lock in’ and ‘path dependence’.
- Establishing how a diverse research base (that cannot be emulated by the private sector) can contribute to ‘slack’ in the regional innovation system in order to underpin innovation (e.g. knowledge spillovers, facilitating related variety amongst sectors, supporting the uptake of platform technologies).
- Finding a place in the national innovation ecosystem where some universities and some regions focus on different stages in the innovation process (e.g. late stage knowledge application as distinct from early stage generation of new knowledge).
Regional Structures and Governance

• HE not domain of local government

• Fragmented local governments

• Limited regional level powers/authority

• Intra regional competition and urban/rural tensions

• Absence of strong private sector R&D base

• Fragmented SME populations – lack or critical mass, absorptive capacity
The disconnected region

PUBLIC SECTOR
- Lack of coherence between national and regional/local policies
- Lack of political leadership
- Lack of a shared voice and vision at the regional/local level

PRIVATE SECTOR
- No coordination or representative voice with which to engage
- Motivated by narrow self interest and short term goals
- Dominated by firms with low demand or absorptive capacity for innovation

HIGHER EDUCATION SECTOR
- Seen as ‘in’ the region but not ‘of’ the region
- Policies and practices discourage engagement
- Focus on rewards for academic research and teaching

No boundary spanners
Focus on supply side, transactional interventions
Ineffective or non-existent partnership
Lack of a shared understanding about the challenges
Entrepreneurs ‘locked out’ of regional planning
University Governance, Leadership and Management

- Lack of institutional autonomy to respond to regional opportunities (e.g. in some countries limited control over estates, senior academic appointments etc.)

- Research intensive universities as ‘loosely coupled’ organisations

- Unrelated drivers for Teaching, Research and External Engagement

- Partnership working confined to senior management and / or isolated entrepreneurial academics

- Intermediate organisations (e.g. science parks, centres for continuing education) detached from academic heartland

- Third role legislation but not part of core funding
Business models of the university

- The **entrepreneurial university model** with a strengthened steering core, enhanced development periphery, a diversified funding base and stimulated academic heartland (Burton Clark 1998)

- The **academic capitalist model** with faculty engaging directly in competitive market-like behaviour as state subsidised entrepreneurs, blurring the distinction between public and private (Slaughter and Leslie 1993)

- The **triple helix model** of universities, business and government with semi-autonomous centres that interface with the external environment supported by specialist internal units (e.g., technology transfer offices) and external intermediaries (e.g., technology and innovation centres) (Etzkowitz et. al. 2000)

- Each of these models underplays the role of place-based communities and civil society
The University and the public good

• “We treat our opportunities to do research not as a public trust but as a reward for success in past studies”
• “Rewards for research are deeply tied up with the production of academic hierarchy and the relative standing of institutions”  BUT
• “Public support for universities is based on the effort to educate citizens in general, to share knowledge, to distribute it as widely as possible in accord with publically articulated purposes”

Calhoun (2006)
The University and the Knowledge Society

• “The university is the institution in society most capable of linking the requirements of industry, technology and market forces with demands of citizenship. Given the enormous dependence of these forces on university based experts the university is in fact in a position of strength not weakness”

• “The great significance of the university is that it can be the most important site of connectivity in the knowledge society...(and)... a key institution for the formation of cultural and technological citizenship .. (and ).. for reviving the public sphere”

Gerard Delanty (2002)
How engaged is the academy?

UK Innovation Research Centre Survey of 22,000 UK academics -
External interaction and commercialisation activity (% of respondents)

[Diagram showing various activities and their percentages]

Which of the following groups or organisations do you think are either primary or secondary beneficiaries of your research?

(online survey of 711 academics in 6 universities)
The ‘un-civic’ university

- Teaching
- Research

FOCUS OF MANAGEMENT AND LEADERSHIP

Funding targets

‘THIRD MISSION’ ACTIVITIES

Hard Boundary between enabling and non enabling environments

THE ‘CORE’

THE ‘PERIPHERY’
Why the ‘Civic University’? (1)

• The on-going global economic crisis is putting governments under enormous pressure to respond to the challenges of public and private debt at the same time as competition is intensifying.

• Local communities and taxpayers facing difficult economic situations are questioning the ‘value’ of universities, especially where the benefits may appear less obvious, e.g. regions of high unemployment.

• Public funding for higher education is under scrutiny, compelling universities to demonstrate their value, and contribution and benefit to society and the economy.
Why the ‘Civic University’? (2)

• In response, universities are rethinking their role and responsibilities, and engaging in learning beyond the campus walls, discovery which is useful beyond the academic community and service that directly benefits the public.

• The concept of the ‘Civic University’ is becoming an increasingly utilised model in trying to describe mutually beneficial engagement between the community, region or wider world and the university.
Seven Dimensions of the ‘Civic University’

1. It is actively engaged with the wider world as well as the local community of the place in which it is located.

2. It takes a holistic approach to engagement, seeing it as institution wide activity and not confined to specific individuals or teams.

3. It has a strong sense of place – it recognises the extent to which its location helps to form its unique identity as an institution.

4. It has a sense of purpose – understanding not just what it is good at, but what it is good for.

5. It is willing to invest in order to have impact beyond the academy.

6. It is transparent and accountable to its stakeholders and the wider public.

7. It uses innovative methodologies such as social media and team building in its engagement activities with the world at large.
The Civic University

TEACHING

Widening participation, community work

RESEARCH

Socio-economic impact

ENGAGEMENT

Enhancement

TRANSFORMATIVE, RESPONSIVE, DEMAND-LED ACTION

THE ACADEMY

SOCIETY
The ‘Civic University’ Development Spectrum

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<tr>
<th>Dimension X</th>
<th>Embryonic</th>
<th>Emerging</th>
<th>Evolving</th>
<th>Embedded</th>
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The spectrum describes the ‘journey’ of the institution against each of the 7 dimensions of the civic university towards the idealised model. It accepts that a university may be at a different stage of development on the different dimensions. This is intended to provide guidance in building a deeper understanding of where the university is currently positioned and help in future planning, and is NOT intended to be used as an assessment or ranking tool.
The ‘connected’ region – strong partnerships based on shared understanding of the challenges and how to overcome them