

This research brief series is intended to provide overviews of different strands of research associated with the Impact of Higher Education Institutions on Regional Economies research initiative.

The initiative is a major research venture jointly funded by the Economic and Social Research Council (ESRC) together with the four UK Higher Education Funding Bodies in England, Scotland, Wales and Northern Ireland. The initiative involves researchers from across the UK and is coordinated by the University of Strathclyde.

The initiative, which began in 2007, aims to promote better understanding of the key economic and social impacts generated by higher education institutions in the UK. There are nine projects, involving academics from across the UK, examining issues of:

- higher education institutions and regional competitiveness
- influence of students and graduates on regions
- knowledge exchange between University and Industry
- universities and community engagement

For further information about the initiative and related research, please see:  
<http://www.impact-hei.ac.uk>

R E S E A R C H B R I E F S E R I E S

**No. 13**  
Understanding the diversity of  
Higher Education Institutions could  
make more effective innovation  
systems

N O V E M B E R 2 0 1 0

## Understanding the diversity of Higher Education Institutions (HEIs) could make more effective innovation systems

**T**oday, HEIs are increasingly involved in the United Kingdom's national and regional innovation systems. The extent and nature of their involvement varies from university to university. However, very little is known about how different types of university interact with business and industry. Most research on university-industry links, treats HEIs as uniform, non-variant organisations, despite the fact that university and higher education institutions (HEIs) have undergone profound changes over the last thirty years. Their various roles – teaching, research, third mission activities and other economic, social and cultural responsibilities – have become more diverse over time. If their role is to be analysed in detail, a classification system needs to be developed for universities and other Higher Education Institutions (HEIs).

This research measures and analyses different attributes of HEIs to produce a new typology of universities and colleges. It investigates their role in UK innovation systems and explains why we need a better description of what universities do. It looks at the way universities have been classified over time and how this has influenced the way that they are seen within the innovation system.

### Key Findings

**Most universities have a multidimensional nature and complex multiple characteristics. In defining them by their nature and role, a number of different clusters emerge.**

Research Peculiar HEIs:

- Large, international and research-intensive.
- Oriented towards enterprise – high exploitation of intellectual property and generation of consultancy income.
- Low overall growth and very low research income growth, although above average teaching growth.

Local Access HEIs:

- Relatively small.
- High ratio of students from low participation neighbourhoods
- High state school participation.
- Low overall growth in terms of funds, but high research growth, although from a low base.

Elite Research HEIs:

- Large, internationally oriented (in terms of the ratio of foreign students), research intensive.
- The fastest income growth rate of all clusters but below average research growth.

London Metropolitan Specialists:

- Based in and around London
- Similar to Research Peculiar HEIs in terms of their overall profile but have the highest growth of all groups in terms of research income.
- Less oriented towards knowledge exploitation and enterprise orientation.

High Teaching Growth HEIs:

- Below average size.
- Highest rate of student growth of all groups between 2002/3 and 2005/6.
- Average overall growth, slightly above average research income, but low research growth.

Research Oriented, Teaching Growth HEIs:

- Large, research intensive.
- Enterprise focused.
- Above average high student growth, but below average research growth.

Open University:

- Very large, high access, domestic focused university. This remains a unique university within the UK higher education system and for this reason has no close associate in terms of institutional profile.

### Implications

Variation of remit and profile of higher education institutions is important:

- In the UK, there is a new search of effective forms of diversity, including a renewed focus on the teaching mission of higher education institutions.
- Institutional status and history influence the interaction an HEI has with industry. Wider changes in the system also influence HEIs interaction with industry.
- Diversity is necessary for the higher education system overall to play a wider role in the innovation system of a nation. It is also important in order to create dynamic system of higher education that meets all its objectives.

Governments still adopt a 'one size fits all' policy strategy with regard to HEIs

- In relation to fostering industry-academic links in the UK, there appears to be little recognition of differences in university profile and in how they may seek to further links with industry.
- A lack of recognition of the diversity of HEIs may affect how the senior managers of universities, colleges and institutes plan and manage their own institutions.

### Methodology

The data used in the analysis were drawn from the latest higher education-business and community interaction (HE-BCI) surveys and the Resources of Higher Education Institutions. A series of variables were chosen to distinguish the 174 universities used in the survey. Thirteen variables were selected to gauge a variety of organisational dimensions that were seen as being important in defining the nature and role of universities and also revealing their multidimensional nature and complex multiple characteristics. These variables can be grouped under five main areas: (1) size, (2) research, (3) teaching, (4) third mission (academic enterprise and technology transfer) (5) social inclusion and accessibility.

### Further Information

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