Connecting universities to regional growth through smart specialisation

John Goddard
Emeritus Professor & Formerly Deputy Vice Chancellor

Context

- Research and Innovation Strategies for Smart Specialisation (S3) an ex-ante conditionality for member states and regions to receive EU regional cohesion funds (to bridge the innovation divide)
- Expectations at the EC, national and regional level for universities to play an active role in the design and implementation of S3 and in creating synergies with the non-spatial research and innovation funds (Horizon 2020)
- The challenge for universities and regions in meeting these expectations
- Link to debates about the role and purpose of higher education in contemporary society in response to the question: what are universities for?
- Two distinct research and policy communities—(1) universities and HE systems with their own internal logic and (2)societal expectations of universities including their contribution to regional innovation and addressing grand challenges, including those with a territorial dimension such as sustainability
- S3 a learning journey for universities, regions and policy makers at the national and European level
What is Smart Specialisation?

- evidence-based: all regional assets
- not top-down decision, but dynamic/entrepreneurial discovery process involving key stakeholders
- global perspective on potential competitive advantage & potential for cooperation
- source-in knowledge, & general purpose and enabling technologies rather than re-inventing the wheel
- priority setting in times of scarce resources
- getting better / excel with something specific
- focus investments on regional comparative advantage
- accumulation of critical mass
- not necessarily focus on a single sector, but cross-fertilisations

The Tree of Navarra's Development

Strategic Business Areas

Transversal factors of Competitiveness
Key Messages

• S3 requires different innovation actors to work closely together, including firms, knowledge producers, government and civil society itself (the end users of innovation and on occasion co-producers of knowledge), in so called ‘quadruple helix partnerships’.

• S3 requires an institutional eco-system that fosters innovation. In some European regions these systems are relatively advanced but many others can be described as ‘institutionally thin’.

• In many lagging regions, HEIs are among the few sources of knowledge that can contribute to innovation. BUT Implementing smart specialisation is not just about focusing the spending of the ERDF on knowledge production.

• On the contrary, S3 requires institutional change and inter-institutional capacity building within quadruple helix partnerships.

• Also an integration of different policy areas and responsibilities, horizontally between different spheres of government, and vertically from the local and regional to national and European levels.

• More specifically at a European and national level between services/ministries responsible for research, regional cohesion and higher education.

The link between HE modernisation and S3

• ‘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’.

Supporting growth and jobs – an agenda for modernisation of Europe’s higher education system (COM (2011) (567)
The ‘connected’ region – strong partnerships based on shared understanding of the challenges and how to overcome them

The link to Research & Innovation

- Universities must “act as strategic institutions pulling together all their know-how to create bigger economic and social impacts. Smart specialisation calls on universities to do more”.
  
  Commissioner Geoghegan-Quinn

- “The key to universities becoming strategic institutions is to take a holistic view of their activities, rather than treating them in isolation. By integrating research, teaching and external engagement, the knowledge created can have a much greater impact”

- “University management as well as academic staff need to become pro-active and move beyond mono-disciplinary and mono functional actions. However, EU and national incentive structures also need to change because they are overly biased towards research output and can hinder universities in playing this strategic role”

Robert Jan Smits, Director General for Research and Innovation

Conclusion of the June 2014 high level conference on mobilising universities for Smart Specialisation

- [http://s3platform.jrc.ec.europa.eu/universities](http://s3platform.jrc.ec.europa.eu/universities)
The ‘un-engaged’ university

The ‘third mission’ activities

Funding targets

Focus of management and leadership

The ‘core’

The ‘periphery’

Hard boundary between enabling and non-enabling environments

A new model: The Civic/Engaged University

Enhancement

Transformative, responsive, demand-led action

Socio-economic impact

Soft boundary

Widening participation, community work

The academy

Teaching

Research

Engagement

Society
Multifaceted roles of universities in regional capacity building

Generative
- Research related (but not limited) to regional priorities
- Multi- and cross-disciplinary
- Connectivity – knowledge nodes
- Support regional analysis

Absorptive
- Help build capacity to ensure local firms absorb knowledge
- Provide demand through teaching and learning activities
- Nurture social ties that drive RIS

Collaborative
- Neutral regional brokers
- Reach Out – need 'boundary spanners'
- Reach In – Co-production of knowledge

Leadership
- Support regional vision and partnership
- Propose joint activities
- Place marketing

Capacities needed for regions to move from ‘disconnected’ to ‘connected’ regions

Generative Capacity
- Research labs
- Talent attraction
- Universities

Absorptive Capacity
- Private sector investment
- Clusters
- Critical mass

Collaborative capacity
- Networks and associations
- Joint projects and shared facilities

Leadership Capacity
- Boundary spanners
- Ability to create a shared vision for the future
The role of universities

- S3 requires the contribution of universities to more generic horizontal capabilities of regions.
- Smart specialisation strategies in regions without the existing conditions (systems) to carry out effective entrepreneurial discovery processes will need to concentrate on fundamental capability formation.
- This can be achieved through strengthening inter-organisational connections between different parts of the innovation ecology (including universities and other public research organisations).
- The formation of strong, enduring partnerships of trust between universities, public authorities, and other actors is of particular importance to the development of smart specialisation in lagging regions.

The barriers

- Financial incentives: who pays for capacity building

- Territorially blind HE and science policy: excellence wherever it is found (e.g. concentration of Framework Programme funding in EU core countries and regions)

- Regional structure and governance: lack of competence in and understanding of higher education – universities as a ‘black box’

- University Governance, Leadership and management
A way ahead: New innovation models and institutional change in universities

- Societal challenges, social/open innovation, and the quadruple helix
- Responsible Research and Innovation
- The civic/engaged/challenge-driven university model