HEIs and the Entrepreneurial Development Process: Learning Organisations in Learning Regions?

Paul Vallance (p.vallance@sheffield.ac.uk)
Centre for Regional Economic and Enterprise Development (CREED), University of Sheffield

Louise Kempton
Centre for Urban and Regional Development Studies (CURDS), Newcastle University

Regional Studies Association Winter Conference, London, 16th November 2018
Introduction

• Aims to examine potential for Higher Education Institutions (HEIs) to support ongoing development of research and innovation strategies for smart specialisation (RIS3).

• Based on a review of ‘entrepreneurial discovery’ exercises in five HEIs across Europe to identify how research and teaching capabilities could be more effectively mobilised to contribute to the implementation of RIS3 in their region.

• Use of multi-level - learning regions and learning organisations – conceptual framework to understand capabilities of individual HEIs to adapt their activities in response to this new innovation strategy environment.
Outline

1) Theoretical framework

2) Project aims and methods

3) Research findings

4) Conclusion
1a) Learning regions and the EDP

- Entrepreneurial discovery process (EDP) in RIS3 as collective, bottom-up exercise to identify innovation domains on which region should concentrate.

- Challenges of associative governance in many European regions.

- Learning regions as ‘developmental coalitions’ – route to activating EDP in less-developed regions (Asheim, 2018).

- Recognition of heterogeneity of individuals and organisations that make up regional learning networks (Hassink and Klaerding, 2012).
1b) HEIs and smart specialisation

• Potential contribution of HEIs to development of smart specialisation well recognised (Foray et al., 2012).

• HEIs can help shape EDP if embedded in regional networks/partnerships with mutual understanding/trust (Kempton, 2015).

• However, RIS3 priorities not the same as academic research strengths of regional universities (Vallance et al., 2018).

• Implies need for HEIs to adjust activities to better align with innovation domains that represent opportunities for structural change/diversification in regional economy.
1c) Universities as learning organisations

- Separate literature on ‘organisational learning’ – ability of an organisational system or culture to adapt to changing environment, strategy or knowledge (Dodgson, 1993).

- ‘Learning organisations’ in private sector and public sector environments (Finger and Brand, 1999).

- Barriers to institution-wide adaptation of universities:
  - loosely-coupled systems (Sporn, 2001)/professional bureaucracies (Mintzberg, 1979)
  - variety of goals/demands in higher education environments – regional engagement activities marginalised (c.f. Chatterton and Goddard, 2000).

- Can European HEIs respond to changes in strategic environment introduced by RIS3?
2a) Entrepreneurial Discovery in HEIs

• Work package led by Newcastle University with input from four other academic partners.

• Focused on supporting the development of existing regional RIS3 by exploring how contribution of partner HEI to this could be enhanced.

• ‘Entrepreneurial discovery’ here as facilitation of structured dialogue between an individual HEI and regional stakeholders.

• Scope encompassed underlying issues that enable or constrain this cooperation – e.g. trust, alignment of priorities, awareness of respective institutional drivers and barriers.
2b) Methodology

• Each participating HEI - 1 or 2 ‘mind setting’ workshops with regional stakeholders during 2016/2017.
  – supported by a mix of interviews, surveys, and/or focus groups.

• Process aimed to identify and analyse:
  – previous/current role of the HEI in the RIS3
  – gaps in regional R&D, innovation, and human capital resources needed for RIS3
  – research/teaching capabilities of HEI that could help fill these gaps
  – how these capabilities could be mobilised and barriers to this happening.

• Synthesis and comparative analysis document of 5 partner reports produced by Newcastle.
2c) Case study institutions

- **POLIMI** - Polytechnic University of Milan (Italy)
- **UPV** – Polytechnic University of Valencia (Spain)
- **NU** – Newcastle University (UK)
- **ULODZ** – University of Lodz (Poland)
- **UTAD** - University of Trás-os-Montes and Alto Douro (Portugal)
### 2d) Case study regions

<table>
<thead>
<tr>
<th>Institution</th>
<th>Region</th>
<th>Country</th>
<th>Regional GDP (PPS per capita) - 2016</th>
<th>National GDP (PPS per capita) – 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLIMI</td>
<td>Lombardy</td>
<td>Italy</td>
<td>37,300</td>
<td>28,200</td>
</tr>
<tr>
<td>UPV</td>
<td>Valencian Community</td>
<td>Spain</td>
<td>23,600</td>
<td>26,700</td>
</tr>
<tr>
<td>NU</td>
<td>North East England</td>
<td>UK</td>
<td>22,600</td>
<td>31,400</td>
</tr>
<tr>
<td>UTAD</td>
<td>Norte</td>
<td>Portugal</td>
<td>19,000</td>
<td>22,500</td>
</tr>
<tr>
<td>ULODZ</td>
<td>Lodzkie</td>
<td>Poland</td>
<td>18,600</td>
<td>19,900</td>
</tr>
</tbody>
</table>
3a) Findings: institutional/regional context

• Contribution of HEI to development of RIS3 framed by position in regional higher education sector:
  – UPV and POLIMI – 1 amongst many HEIs in region
  – NU and ULODZ – leading research universities in region
  – UTAD – particular significance within rural economy of Douro sub-region.

• Varying strength of regional institutions responsible for RIS3 – strategies at different stages of maturity:
  – Lombardy, Valencia – regional governments
  – Lodzkie, Norte – established economic development agencies
  – North East England – new Local Enterprise Partnership (smart specialisation as a ‘still emerging innovation framework’).
3b) Involvement of HEIs in RIS3

- Direct involvement in RIS3 development and implementation activities not strategic and limited to relatively few individuals.

- However, an opportunity to deepen HEI involvement in regional innovation system around (clearly articulated) priority domains.
  - Identification of mechanisms to encourage collaboration with industry in these areas - e.g. information exchange forums, visiting professors, paid student internships.

- Underexplored potential for HE teaching to contribute to RIS3 – reflecting importance of skills/human capital in less-developed/peripheral regions.

- HE environments do not support responsiveness to regional economic needs – e.g. hard for HEIs to introduce new teaching programmes in some funding systems.
4) Conclusion: learning organisations?

• Only weak incentives for institutions/academics to respond to RIS3 – regional innovation policy separate from main drivers in higher education environments.

• Decentralised structure of most HEIs – adaptation to RIS3 innovation domains more likely at level of academic sub-units than whole institution.

• Power imbalances between regional bodies and HEIs as a barrier to mutually beneficial partnerships.

• HEIs could contribute to RIS3 through teaching - but need to match supply of specialist skills/knowledge to emerging labour demand in smart specialisation domains.
Regional Studies Policy Expo:
HEIs in Regional Development

PANEL AT 13.10 – IN BOOKER