



# The Role of Universities in Innovation and Regional Development

## The Role of HEIs in Regional Innovation & Development Strategies

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EU-SPRI 2019: Science Technology and Innovation Policies for Sustainable Development Goals. Actors, Instruments and Evaluation



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Marie Skłodowska-Curie grant agreement No. 722295.

# Universities in Regional Development

- Knowledge-economy: Regions are increasingly reliant on knowledge assets to find creative solutions to increasingly complex societal challenges & compete globally
- Universities are believed to leverage development gaps & build innovative as well as competitive capacity (Arbo & Benneworth, 2007; Chatterton & Goddard, 2000; European Commission, 2011; Uyarra, 2010).
- Universities have become crucial actors in regional development & innovation processes.



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Why are #regions important for transformative change? @edurnemagro, @euyarra & @kieronflanagan highlight 3 reasons: innovation is spatially sticky, challenges are contextual & implementation is local. Interesting first parallel session at #EUSPRI2019 Conference!

🌐 Tweet übersetzen



10:29 - 5. Juni 2019

# Universities' Regional Roles

- Universities were initially framed through their roles as knowledge-disseminators and knowledge-producers, i.e. their teaching and research missions.
- Universities have been assuming more regional roles → «third mission»
- Such models or roles are nonexclusive & overlapping in a university's institutional positioning



Roles Identified	HEIs in these roles	Context	Source
<b>Anchors</b>	HEIs are locally embedded institutions with strong attractive potential for population & investment	HEIs with a potential to contribute to the regeneration of vulnerable places.	Goddard et al., 2014
<b>Service-providers</b>	HEIs are hired to perform punctual functions on a contract-basis.	Customary in university-industry relationships, but also increasingly in some contexts through consultancy with government authorities.	Perkmann et al., 2013
<b>Generators</b>	HEIs are involved in capital formation projects (e.g. science parks, incubators).	Commonly framed within the triple Helix model & literature, in which HEIs can take on some of the functions of industry &/or state.	Etzkowitz & Leydesdorff, 1997; Gunasekara, 2006
<b>Connectors, Bridge builders, Partnership facilitators</b>	HEIs facilitating partnerships between universities & other stakeholders / organisations in society	Innovation is a process in need of openness & democratic participation by knowledge producers, managers & users across society	Hansen & Lehmann, 2006; Sedlacek, 2013
<b>Intermediaries within networks</b>	HEIs fostering the 'know-how', 'know-who' & 'know-what'	In the context of participating in the development of local clusters / providing training & skill development / by forging important networks	Larty, Jack, & Lockett, 2017; Rantisi & Leslie, 2015
<b>Animators</b>	HEIs engage in design & support of programmes with communities in their region for wider socio-economic benefit.	In the context of regional economic governance HEIs in regional planning arrangements in old industrial regions	Chatterton & Goddard, 2000; Pugh et al., 2016; Benneworth & Hospers, 2007
<b>Co-creators</b>	HEIs collaborate with a variety of actors to attain societal transformation.	Approached in the context of cross-sector partnerships for sustainable & place-based societal transformation.	Trencher et al., 2013
<b>System Builders</b>	HEIs stimulate regional innovation systems & fuel interorganizational learning. HEIs helping build & support regional innovation systems.	Framed in the context of regional innovation systems' literature.	Caniëls & van den Bosch, 2011; Arbo & Benneworth, 2007

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# Universities' Regional Roles

- Studies on universities' regional roles still most frequently focus on cases of university-industry collaboration (Pugh et al., 2016), with few examples of an extended perspective of the «third mission», (Fonseca, 2019) i.e. universities' engagement in regional governance & collaborative platforms (Nieth & Benneworth, 2018).
- There is still a lack of definition of what exactly these roles entail in practice & a tendency to conflate & homogenise them across universities, contexts & timeframes (Flanagan et al., 2010; Uyarra, 2010).
- May lead to a altered perception in the identification or conceptualisation of such roles & limit the awareness of universities' potential regional impact → "role overload"?

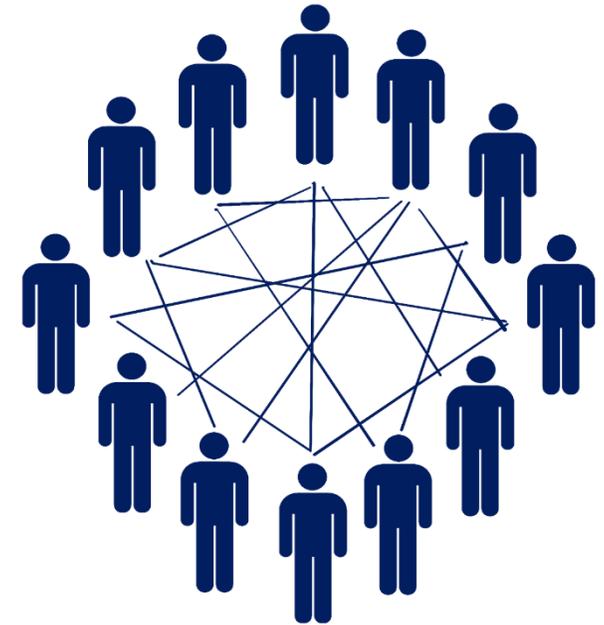
## Boucher et al. (2003)

Examples of variables that influence university's regional roles:

- Type of region (core or peripheral);
- Regional identity;
- Regional network type;
- Characteristics of the higher education system;
- Number, scale & age of universities in the region;
- University's strategic orientation;
- University's embeddedness in a regional strategy (i.e. international, national, regional);
- Source of funding.

# Universities in Regional Innovation & Development Strategies

- Tendency in the last decades to call upon universities to participate in regional innovation & development strategies, agendas & policies.
- Idea of bottom-up, collaborative regional governance → Universities have become one of the stakeholders expected to collaborate in these multi-partner governance processes (Goldstein & Glaser, 2012).
- Emergence of the Smart Specialisation framework → Entrepreneurial Discovery Process: regional stakeholders progressively identify, define and work towards a regional future → including knowledge institutions as central and especially capacitated actors (Foray et al., 2012)



# Problematic & Research Questions

- Under-exploration of the nature of universities' engagement with external entities besides business / industry & the roles they play in these contexts.
- Lack of insights into the type of participation in the strategies, the expected activities that would be understood as a contribution & the conditions under which a university can become a vital stakeholder within a regional strategy.
- Details towards why any of these roles is taken on & which conditions have an impact on the way universities perform them remains understudied.

## Provisional Research Questions:

- 1) Under which circumstances do universities play what kind of roles in regional innovation strategies?
- 2) To what extent do these roles vary (in relation of the policy stream and the actors)?
- 3) Which determinants have an impact on their participation in those strategies?

# Methodology & Case Studies

- Qualitative, comparative case-study approach;
- Document analysis & interviews (n=129).
- 4 universities involved in regional development strategies/policies:
  - Young universities;
  - Part of ECIU network;
  - Different national & regional contexts;
  - Interested in extended engagement activities.
- Analysis of key themes across the four case-studies:
  - University-level variables;
  - Policy timeframe variables.



**AALBORG UNIVERSITY**  
DENMARK



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# Empirics



## Strategy Design

- Growth Forum → “text-book example of new-model partnership-based governance” (Halkier, 2008)
- Top management participated in meetings in which the regional priorities were aligned, selected & confirmed
- Managers from Region contacted their own, individual partners at AAU to include knowledge of academics in specific areas

## Strategy Implementation

- Top management in the Growth Forum →  
**“The university is the actor who introduces a broader, less political and trustworthy, research- perspective”**
- Growth House & clusters as recipients of funding → remotely involved in the implementation



## Strategy Design

- Co-creation of last 2 territorial development strategies (framework periods 2007-2013 & 2014-2020) with the intermunicipal community of the region (CIRA)
- Pro- **“AAU is the twelfth municipality of Aveiro region”** meetings, helping define and align priorities & co-leading the drafting of the strategies
- Top-managers assembled a team of academics/technicians to support engagement & lead participative public consultation

## Strategy Implementation

- Top management became involved in developing specific projects & participated in fund management (later AIDA)
- Academics participated in round-tables & provided knowledge to selection/approve funding. Led and/or supported projects, but *“each department just tries to deal and make its own work”*.
- UATEC coordinated participation in certain projects, (entrepreneurship) & managed UA internal academic contacts to boost & orient participation in projects.

# Comparative analysis

Universities in strategy design	Universities in strategy implementation	Universities in strategy monitoring	Actors involved in engagement & strategy processes
<ul style="list-style-type: none"> <li>Universities with a stronger participation in strategy-design in regions where these universities were either the <u>sole HEI</u> (UA) or where the <u>most prominent</u> (AAU &amp; UT). These were also generally <u>peripheral regions</u> → “<i>regionally influential universities [can] fill the void of regional government capabilities</i>” (Aranguren et al., 2019)</li> <li>Participation through top management as representatives in regional platforms (UT, AAU) or as leading partners (UA)</li> <li>Limited participation of UAB &amp; other HEIs in the region due to restrictions of the process.</li> </ul>	<ul style="list-style-type: none"> <li><u>Absent strategic approach</u> towards strategy implementation.</li> <li>Top-management providing representation. Universities as knowledgeable &amp; neutral ‘<u>evaluators</u>’ of priorities.</li> <li>Academics &amp; research groups as fund recipients &amp; project partners (sometimes even leaders) in the implementation of instruments/projects in line with the strategies, but very much <u>dependent on individual motivation</u>.</li> </ul>	<ul style="list-style-type: none"> <li>Evaluation of the strategies &amp; their results have been few or unobservable;</li> <li>Catalonia has chosen to develop its monitorisation more closely with a UAB expert, though emphasised as an <u>individual, not an institutional participation</u>.</li> <li><u>Monitoring as a lesser preoccupation</u> for government authorities.</li> <li>BUT, review of the former strategies is conducted when new strategies are designed.</li> </ul>	<ul style="list-style-type: none"> <li>University <i>top-management</i> is often tied to regional partners through engagement contracts or specific roles in <u>regional platforms</u>.</li> <li>Often this commitment is <u>not broken down internally</u> (attempts seen in UA &amp; UAB);</li> <li><i>Academics</i> mainly participated in the strategy process <u>autonomously</u>;</li> <li>Intermediary bodies coordinated internally, but <u>underutilised</u>.</li> </ul>

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# Preliminary Conclusions & Final Reflections I

- Dichotomy between formal & informal modes of interaction;
- Informal connections give rise to more continuous forms of interaction that were considered crucial in ensuring the unlocking of impasses during the strategy process & resulted in wider, often unexpected benefits (e.g. institutional capacity-building & network expansion).
- Different university stakeholders not only played different roles at different phases, but they did so not only from their own institutional volition but also from pressure of regional authorities & due to regional as well as institutional path-dependency.
- Increased necessity for coordinated engagement between universities & governmental institutions, as well as potential new stakeholders in the regional governance process.
- Regional setting, as well as the different stages of the strategy process, pose varied challenges, constitute opportunities & call for varied approaches to stakeholder engagement.

# Preliminary Conclusions & Final Reflections II

- The rapid emergence of territorial strategies in the last decades has accelerated the creation & implementation of strategies before a conceptual & empirical understanding about them was established (Valdaliso & Wilson, 2015) → role of universities in strategies developed “on the go” → flexibility & vagueness
- Regional strategy processes need be concerned with innovation & regional development and should not (just) be about different stakeholders learning to cooperate (European Commission, 2017) → Assure that the regional partners know how to work together - not being restrained by their institutional differences (Nieth, 2019)
- More attention must be given to universities’ complexity & diversity → we cannot assume they are highly flexible or integrated actors (Uyarra 2010; )



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**Thank you very much! Comments? Ideas? Questions?**

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**[runinproject.eu](http://runinproject.eu)**

		Actors at University Level		
		Top Management	Academics	Intermediaries
STRATEGY DESIGN	AAU	Top management (of the rectory team & AAU Innovation) participated in meetings in which the regional priorities (represented in the strategy) were aligned, selected & confirmed	Managers from the Region contacted their individual partners at the university to include the knowledge of academics in specific areas (when necessary)	AAU Innovation could be considered as an intermediary here,
	UA	Top-managers (rectory team) coordinated inter-institutional engagement and strategic orientation of UA in the strategies. Pro-Rector for Regional Development is main point of contact, participating in meetings, helping define priorities and co-leading the drafting of the strategies.	Top-managers assembled a team of academics and technicians to support engagement, analysis and public consultation in the strategies. Academics across UA also participated in internal consultations in the beginning of the strategies' process.	UA's TTO, UATEC, participated in the drafting of certain themes of CIRA's strategies relating to valorisation and entrepreneurship.
	UAB	Provided feedback on final document and participated in public consultation.	One academic participated in the Council of Consultants as an expert for the initial drafting of the RIS3CAT. Individual, not institutional participation. Other academics responded to the public consultation.	ACUP represented public universities in Catalonia in the RIS3CAT's Council of Consultants for the initial drafting of the strategy.
	UT	The president of the executive team and his close advisors were actively involved in the Twente Board & the steering committee of the Agenda van Twente - advising and deciding on priority setting	Definition and concretisation of details within the thematic action lines is done by the region with help of specific professors. These contacts are either already existent or are facilitated through top management.	Novel-T is actively involved in the Twente Board and therefore also indirectly involved.
STRATEGY IMPLEMENTATION	AAU	Due to the role of top management in the Growth Forum and setting committee, they actively participate in the selection of funded projects.	Academics apply for and participate in projects that are funded by the funds managed through the Growth Forum.	Growth House and clusters are recipients of funding and participants in projects. They are remotely involved in the implementation.
	UA	Partners in developing specific programmes and participation in fund management.	Academics participation in round-tables. Provided useful knowledge to facilitate selection/approval of funding. Led and/or supported emerging projects.	UATEC coordinated participation in certain projects, particularly related to entrepreneurship. Also managed UA internal academic contacts to boost and orient participation in projects.
	UAB	Coordinated engagement within major RIS3CAT instruments, like Communities and PECTs	Top-managers coordinated academic contacts internally depending on areas of interest. Some of these academics then developed direct links with external partners for the continuation of the project.	PRUAB was involved project coordination and participated in certain calls and instruments.
	UT	Top management is involved in the selection of projects through the Twente Board.	Academics participate in strategic tables that initiate and discuss projects according to thematic action lines defined in the agenda.	Novel-T has a chair in the Twente Board, thereby selecting projects and participating in others