Using international networks for domestic strategies: research impact for society

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Arjan Schalken, Vrije Universiteit Amsterdam
Max Petzold, Swedish National Data Service
Aurora

- Nine intensive research universities: World top 200 in excellence
- Focus on learning with and from each other in matching excellence and relevance
- High-trust non-competitive: one university per country
- Four strategic priorities
  - Diversity & Inclusion
  - Societal Impact & Relevance of Research
  - Student engagement
  - Innovation of Teaching & Learning
- Academic cooperation is interesting side-catch
Aurora

UNIVERSITÉ Grenoble Alpes

VU UNIVERSITY AMSTERDAM

UEA University of East Anglia

UNIVERSITY OF GOTHENBURG

Universiteit Antwerpen

UNIVERSITY OF ICELAND

UNIVERSITETET I BERGEN

UNIVERSITÄT DUISBURG ESSEN

UNIVERSITY OF ABERDEEN

AIEA

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Purpose and set up

• Priority = Societal Impact & Relevance of Research (SIRR)

• Aurora SIRR strategy → Aurora SIRR projects
  • Societal impact: Practices and pathways Staffan
  • SDG-Based Bibliometrics: Arjan
  • Open Data Indicators: Max
Shared sense of mission

• “Post-truth” is obviously a threat to most universities since many universities have become too disconnected from society. For us the rhetoric is dangerous because it is not true
• We are not just here to research and teach
• We are part of society and we want our actions to be useful to society

• And we will develop a strong evidence base to prove it
Societal impact: Practices and pathways
Many research universities wrestle with similar fundamental challenges in this domain:

• How to get beyond a mere economical perspective, counting patents and links/coproductions with the corporate sector?

• How to solve the intrinsic problems that societal impact takes (a lot of) time and that attribution to specific academic work is hard to prove?

• How to avoid ‘gaming’ and other perversions of any fixed system?

• How to overcome the strong focus of researchers on scientific excellence, driven by citations?
Societal Impact & Relevance of Research

• Overall strategic vision
• October ‘16 → Nov’17: from idea to strategy and projects:
  • Societal impact: Practices and pathways
  • SDG bibliometric analysis
  • Open Data Indicators
  • Research Data Management
  • Benchmarking Research Quality
Societal impact: Practices and pathways

AURORA universities will share Practices and Pathways to learn from each other with the ultimate goal to develop a AURORA catalogue.

Example from Sweden

• In the latest research bill from the government the words “cooperation”, “relevance” and “impact” were more frequently used than “research”.
  • The government has allocated most of new research money to the Swedish Innovation Agency (VINNOVA) to enhance the capacity of HEIs capacity of societal cooperation -
Societal impact: Practices and pathways

The VINNOVA investment in HEIs societal cooperation capacity
• Involves HEIs in Sweden (34/36)
• 12 different project supported – all as joint projects between several HEIs.
  • Examples where University of Gothenburg is participating
    • Meeting places
    • Citizen Science
    • Mobility
    • Merits
    • Knowledge Management Platform
    • Quality systems –

The experiences from these projects will be shared with our AURORA partners
SDG-Based Bibliometrics
Bibliometrics based on core values

“we are committed to working together to find solutions to GLOBALLY RELEVANT PROBLEMS, in areas such as sustainability, climate and energy, digital health”
Bibliometrics based on core values

- Research evaluation
- Opportunity's for cooperation
- Positioning / story telling
External playing field for the university
Internal playing field for the university
Positioning a model based on standards

VSNU Standard Evaluation Protocol (SEP)

<table>
<thead>
<tr>
<th>Type</th>
<th>Research quality</th>
<th>Societal relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>⏰</td>
<td>🏛️</td>
</tr>
<tr>
<td>Use</td>
<td>🏆</td>
<td>🏛️</td>
</tr>
</tbody>
</table>

2015-2021


http://www.vsnu.nl/sep

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<table>
<thead>
<tr>
<th>SDG: Themes</th>
<th>SEP: Research Quality</th>
<th>SEP: Relevance to society</th>
<th>Policy papers referring to all VU climate research</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Zero Hunger</td>
<td>179%</td>
<td>480%</td>
<td>44%</td>
</tr>
<tr>
<td>3 Good Health and Well Being</td>
<td>110%</td>
<td>81%</td>
<td>41%</td>
</tr>
<tr>
<td>11 Sustainable cities and communities</td>
<td>169%</td>
<td>292%</td>
<td>50%</td>
</tr>
<tr>
<td>12 Responsible consumption and production</td>
<td>147%</td>
<td>233%</td>
<td>26%</td>
</tr>
<tr>
<td>13 Climate Action</td>
<td>308%</td>
<td>462%</td>
<td>42%</td>
</tr>
<tr>
<td>15 Life on Land</td>
<td>193%</td>
<td>1194%</td>
<td>56%</td>
</tr>
<tr>
<td>17 Partnerships for the goals</td>
<td>235%</td>
<td>223%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Policy Sources:
- Intergovernmental Panel on Climate Change (n=2006) 61
- The Publications Office of the European Union 44
- Food and Agriculture Organization of the United Nations 41
- Australian Policy Online 40
- National Academies Press 33
- World Bank 28
- rijksoverheid.nl 21
- overheid.nl 11
- World Health Organization 10
- National Bureau of Economic Research 8
- The Inter-American Development Bank 6
- UK Government (GOV.UK) 6
- UNI-CLU 4
- Brookings Institute 2
- The International Fund for Agricultural Development 2
- UK Parliament Briefing notes 2
- International Monetary Fund 1
- Oxfam GB Policy & Practice 1
- The International Institute for Sustainable Development 1

Totaal: 331
Step 1: Develop a model
Step 2: Positioning the concept

Positive feedback
DG Research & Innovation
Step 3: first usage in ‘real life’

Keynote speech during Dies Natalis celebrations
Topic: Sustainability
Step 4: Adoption by Aurora experts
Step 5: first test on evaluating institute
Step 6 (pipe line) : analytics Aurora Africa-group

MARCH 15-16, 2018
Amsterdam

The Aurora Africa group will meet in Amsterdam, March 15 and 16, to carry on the work started in Reykjavik and Norwich.

The 'Africa group' aims to share expertise among Aurora partners in working in Africa and to identify and implement opportunities for collaboration in working with partners in Africa.

The Africa group is now in the process of identifying more concrete projects and opportunities for sharing expertise and realising synergies in each other’s events.

Specific projects now foreseen / planned:
- using SDOs as a framework to align AURORA’s initiatives related to Africa
- reciprocal participation in conferences/seminars in Bergen and Kenya
- other ideas: Aurora Africa MOOC, SDG Africa watch, ‘communicating science’

The Amsterdam meeting will be used to carry one or more of these initiatives into a more concrete implementation phase.
Step 7 (ambition): formalization, upscaling
Success factors

• Link with strategic agenda (university and Aurora)
• Active support sr. management
• Providing a solution for an actual management problem within the university
• Finding ambassadors (keynote speech, first evaluation)
• Working as a team (experts – researchers / managers)
• Giving experts time to learn, investigate, cooperate
• A project manager with a vision (Maurice Vanderfeesten @Maurice_
Open Data Indicators
Public Institutions and Open Data

The European Union Open Data Portal (EU ODP) gives you access to open data published by EU institutions and bodies. All the data you can find via this catalogue are free to use and reuse for commercial or non-commercial purposes.

Show results with:
- all of these words
- any of these words
- the exact phrase

Search for metadata using our SPARQL endpoint query editor or access the API.
Research Institutions and Open Data

SND Swedish National Data Service

Search research data in the catalogue

Data Management
Information about what Data Management means, along with guides and advice

Describe and deposit data
Here you can find information on why you should deposit research data with SND, how it

News
Interested in the ICPSR Summer Program
The program for the ICPSR "Summer Program in Quantitative Methods of Social Research" will...
GIS-material for the archaeological project: Stone settings and a Stone Age shore

The information in the abstract is translated from the archaeological report: Due to planned house construction within the property Kallerstad 1:27, in the city and municipality of Linköping, Östergötland County, the ...

- Swedish National Heritage Board, UV Öst

Published: 2012-11-21

GIS-material for the archaeological project: Stone Age remnants in an electric cable trench

- Swedish National Heritage Board, UV Öst

Published: 2012-11-22

GIS-material for the archaeological project: Stone Age remains in Ledberg-Västerbräninge

- Swedish National Heritage Board, UV Öst

Published: 2012-11-22

GIS-material for the archaeological project: In search of the Stone Age in Krokek

- Östergötland Museum

Published: 2012-11-22
Open Data - Societal Impact & Relevance of Research

• Universities would gain from collecting and presenting relevant Open Data Indicators on Societal Impact and Relevance of Research.

• A number of Open Data Indicators has been suggested, but normally only by the data repositories,

• and there is limited experience in collecting and presenting such indicators on university level.
The project aims to:

I. Identify potential SIRR Open Data Indicators
II. Identify needed collaboration between universities and data repositories
III. Real world collection of these indicators at a number of universities in different countries
IV. Assess the validity of the indicators
V. Construct a short list of suggested indicators and identify potential obstacles in indicator collection
Example indicators

<table>
<thead>
<tr>
<th>Table. OPEN DATA INDICATORS PRESENTED BY UNIVERSITY</th>
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</thead>
<tbody>
<tr>
<td><strong>Open research data indicators</strong></td>
</tr>
<tr>
<td>1. Number of data sets with DOI in all repositories (per certified/non-certified repositories) – indicates findability, quality of research</td>
</tr>
<tr>
<td>2. Number of data sets with connected publications and reports connected via DOI in participating repositories – indicates completeness</td>
</tr>
<tr>
<td>3. Number of downloaded datasets to the university from participating repositories – indicates reusability, awareness of open science</td>
</tr>
<tr>
<td>4. Number of downloaded datasets to other universities from participating repositories – indicates findability, quality of research</td>
</tr>
<tr>
<td>5. Number of cited data set in journals and reports – indicates reusability, quality of research</td>
</tr>
<tr>
<td><strong>Societal impact</strong></td>
</tr>
<tr>
<td>1. Number of data sets downloaded by non-university affiliates and the public (presented by categories, e.g. journalists, politicians)</td>
</tr>
<tr>
<td>2. Data used by other authorities to monitor development over time, e.g. environmental/climate data.</td>
</tr>
</tbody>
</table>
Initial partner universities and associated data repositories
Discussion

• What are key challenges/risks in focusing international networks on domestic issues and how can you cope with that?
• Is this model limited to universities in a concise geographical area?