Seminar on Engaged Research in Europe: the Science Shop Experience
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Engaged Research through Science Shops in Europe

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Structure

› View on Knowledge Production
› Science Shop in Context
› Examples of Projects
› Practice: Brokering
› From The Netherlands to Europe
› Living Knowledge Network
› Impact
Research

University

KNOWLEDGE

Society

Popularisation
- Economy
- Culture
- Democracy

Graduates

Education

Graduates

Classical Model (Humboldt)
Mode I

Transmission Model
University

Research

KNOWLEDGE

Education

Society

Application / Skills

Experience / Time

Classical Model (Humboldt)

Mode I
Mode II Science & Society
Knowledge Mobilization
Knowledge Exchange

Co-creation of Knowledge
Science Shop

› A Science Shop provides independent & participatory research support in response to concerns expressed by civil society

› Research *for*: civil society organizations (CSOs), citizen groups, non-profit organisations

› Research *by*: students (course credits) under staff supervision*

› Free/low cost (coordination paid by university)

=>> Dialogue!
Science Shop

* Other business models
  - Separate (non-profit) organization
  - More towards implementation of projects
  - Partnerships
KNOWLEDGE

University

Society

Research

Issues

Science Policy
Research Programmes

Science Shop

Education

Application / Skills
Experience / Time

Co-Creation

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KNOWLEDGE

University

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Science Policy

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Knowledge

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Experience / Time

Education

Science Shop

Participatory Action Research

Citizen Science

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University of Groningen

Since 1614
Classical University
30,000 Students
5,000 Staff

# 69 (ARWU Shanghai Ranking)
#80 (THE Ranking)
University of Groningen
6 Science Shops (since 1979)
- Business Management and Economics
- Medicine and Public Health
- Languages, Culture, Communication
- Education Studies
- Science and Engineering
- Philosophy
+ Green Office

Approx. 200 projects/yr
Approx. 825 students/yr
(~12% of cohort)

Neighbourhood Efforts Students and Young People (~WISE) (since 2017):
Hanze University of Applied Sciences,
Municipality of Groningen,
Social Work Foundation Groningen,
Alfa and Noorderpoort
(vocational schools)
Groningen Science Shops

Philosophy:
- Housing Cooperations / Living Together
Groningen Science Shops

Language, Communication and Culture:
  - Archeology Monastry Thesinge
Groningen Science Shops

Medicine and Public Health:

- “Landlady 2.0”
Groningen Science Shops

Education Studies:
- “Pearl-plan” Village Schools
Groningen Science Shops

Business Management and Economics:
- Diversity Management
Groningen Science Shops

WIJS:
- Loneliness
Science Shop Groningen

- City of Assen: Street Lighting in Natural Area:
  - Social Safety
  - Energy saving
  - Does not disturb nature
- Ecology Department
- NGO “Bats Working Group”
- Green coloured LED lights
- GREEN LIGHT FOR BATS!
Examples Groningen

Science Shop Physics

Wind Turbines – Noise at night (Residents) → PhD

$$L_W = L_{eq} - 6 + 10 \cdot \log\left(4\pi \cdot R^2 / A_o\right)$$
Examples Science Shop

- Earth Quakes from Gas Winning
- Headlice
Mediation Tasks

1. Receive/solicit "clients" and questions
2. Map the problem (articulation)
3. Preliminary research: Refer, Refuse, Advice or Formulate (scientific) research question (Incl. funds if required)
4. Find a (co-) supervisor
5. Find a student or researcher
6. Maintain communication and process
7. Facilitate useable presentation/publication of results
8. Help client implement results and formulate follow up actions
9. Make inventory of follow-up research/themes
10. Evaluation
Projects in curriculum

- In existing (or new) courses / practical periods
  - First year physics practical
  - “Communication & Presentation”
  - Minor “Future Planet Innovation”

- Novel optional “course”
  - “Science shop project”

- As B / M thesis / project
- Practical placement
- As PhD thesis

- Honours Programmes
- Skills Portfolio
Make project fit

Split

- Disciplines (Chemistry, Medicine, Communication; Economics)
- Multi-disciplinary teams → multi-disciplinary course units (Academic Consultancy – Wageningen; Minor Future Planet Innovation Groningen, …)

Enlarge

- Case + theory (thesis)

Timing

- Fit client’s scheme & students availability
Dutch Science Shops

University of Groningen (6x)
Hanze University Groningen
Technical University of Twente
Wageningen Agricultural University
Technical University of Eindhoven (1x)
Vrije Universiteit Amsterdam (1x)
City Deal “Making Knowledge / Getting Acquainted”
Living Knowledge

International Science Shop Network
‘Living Knowledge’

General objective:
To give citizens around Europe (and beyond) better access to scientific information and expertise!
Living Knowledge

- Open, collaborative network / No legal entity
- Limited funding through projects of ‘members’
- Community of practice
  - Information exchange
  - Training / mentoring
The Living Knowledge Network

Living Knowledge – Exchange, Networking and Building Partnerships

The Living Knowledge Network is composed of persons active in -or supportive of- Science Shops and Community Based Research. Living Knowledge aims to foster public engagement with, and participation in, all levels of the research and innovation process.
Living Knowledge

- Open, collaborative network / No legal entity
- Limited funding through projects of ‘members’
- Community of practice
  - Information exchange
  - Training / mentoring
  - Joint projects
- Strategic impact
  - Visibility, spin-off
  - Policy impact
EU and Science Shops

**Science Shop Call 2006**
- [CIPAST (CA), EFSUPS (SSA)]
- [SpidERA (SSA), ACCENT (NoE)]
- [ WINDFARMperception ]
- [ NewCom, VECTOR, InMoSion]

- RRI Tools (2014-2016)
- H2020 Science Shop Call 2016
  - [InSPIRES] [scishops.eu]

**International Science Shop Network**

**LIVING KNOWLEDGE**

**SCIPAS** (2000 – 2001) STRATA-AM

**INTERACTS** (2001 – 2003) STRATA-AM

**ISSNET** (2003-2005) RPA-TN

**TRAMS** (2005-2008) S&S-CA

**FP 7 – PERARES** (2010-2014)

**H2020** (2015-2022) – EnRRICH, Sparks, BigPicnic, BLOOM, TeRRIFICA

Erasmus+: ENtRANCE, CIRCLET

**MinForeignAf: MATRA-RUG-Romania**


[www.livingknowledge.org]
EU and Science Shops

SCIPAS (2000 – 2001) STRATA-AM

International Science Shop Network
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RRI Tools (2014-2016)

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[InSPIRES] [scishops.eu]
Sciece Shop Impact

› CSOs: empowered in their work and actions for the wellbeing of society & citizens (*inclusive*)
› Students: motivation, (*employability*) skills, social awareness
› Staff: data, networks, new angles, outreach
› “Science”: new knowledge, new research themes (*follow-up*)
› University: PR, education, social responsibility, societal impact (by *starting* from a need....)
› Policy makers: more data to base decisions on

› Efficient: add-*in*, combines 3 missions university
› Limitations: timing, funding → grants!
› Limitations: support from ‘the system’
Responsible Research and Innovation (RRI)

“generate innovation that reflects societal views & needs”

Process:
Anticipation, Reflexivity, Inclusion and Mutual Responsiveness
‘Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share the scientific advancement and its benefits’

Universal Declaration of Human Rights, Art 27(1) (United Nations, 1948)
Pre-conference: 28-29 June
Conference: June 30-July 2

Plan A: Regular Conference
Plan B: Hybrid Conference
Plan C: Fully On-line Conference
Groningen
Groningen
Pre-conference: 28-29 June
Conference: June 30-July 2
GRONINGEN – NL

https://livingknowledge.org/lk9/
YOU’RE WELCOME!
Thanks!

Our Annual Report:

https://www.rug.nl/society-business/science-shops/over-de-wetenschapswinkels/nieuw-nieuws/living-together-working-together-making-knowledge-together