Building a Science Shop/Research Shop: Refining your model

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About us

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www.livingknowledge.org
A Science Shop (is a unit that) provides independent research & support participatory in response to concerns expressed by civil society.
Science Shop - Wetenschapswinkel - Boutique de Science - Epylion
Videnskabsbutiken – Wissenschaftsladen – BioSense - IntHum
Bazar de las Ciencias – InterMediu – Interchange - CUPP HelpDesk
Community Knowledge Exchange - Research Shop - Echop a Sciences
Forskningstorg - Knowledge Co-Op - Community Based Research Center
Students Learning With Communities - Teadusturg – CURL
ShopFront - Office of Community Based Research -

Living Knowledge
The International Science Shop Network

1970’s Netherlands (+ USA, Canada, CBR/PAR)
1980’s Australia, Denmark, England, Northern Ireland, Germany, Austria, France, Belgium
1990’s Canada, Spain, Romania, New Zealand, Malaysia, Czech Rep, South Korea, South Africa
2000’s Belgium, France, South Korea, Portugal, Latvia, Japan, Wales, Ireland, Turkey, Hungary, China, Italy, South Africa
2010s Cyprus, Estonia, Greece, Israel, Norway, ……….
Workshop Goals

a. Identify multiple models for operating a science/research shop
b. Address practical needs in the mediation process (needs articulation, links with curricula)
c. Address strategic issues around institutional commitment and funding
d. Provide networking opportunities
Exercise 1: Your Current model

1. What do you already have? (what is it you do; who is your primary “audience” – students, researchers or in CS?)

2. How does it work (Where are the question from? Results go to?)

3. Strengths/Challenges? (What are your resources now?)
Science Shop Criteria

1. Scientific/research element.

2. Public results.

3. Relevant to number of people.

4. Client is able to use results.

5. Question is not commercial.

→ Then no financial blockade
Examples Groningen

Science Shop Physics

Wind Turbines – Noise at night (Residents) → PhD

\[ L_W = L_{eq} - 6 + 10 \cdot \log(4\pi R^2/A_o) \]
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!
Mediation Tasks

1. Receive/solicit clients and (new) 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
1. Receive/solicit clients and (new) questions

- **Active Public** comes by itself
- **Conscious Public** through other organisations
- **Latent Public** targeted acquisition / needs survey
- **Passive Public** help organise?

**Type of questions:**
- research
- encyclopedic
5. Find a student or researcher

- Advertisements, web, teacher, contacts, thesis-market, speed date
- Science Shop Advisory Board

Choice:

- Student: credit-points; “out-of-the-box” thinking, eye openers
- Researcher: finance
- Criteria: Funds, quality, time-pressure
- Client: participation
Projects in curriculum

- In existing (or new) courses / practical periods
  - First year physics practical (Gron.)
  - “Communication & Presentation” (Gron.)
  - “Science & Society” (Bacau)

- Novel optional “course”
  - “Science shop project” (Gron.)

- As BSc / MSc thesis (General)

- As PhD thesis (eg Tilburg)
Make project fit

- **Split**
  - Disciplines *(Chemistry, Medicine, Communication; Economics)*
  - Multi-disciplinary teams

- **Enlarge**
  - Case + theory (thesis)

- **Timing**
  - Fit client’s scheme & students availability
Examples from within one university

- Computer Science
- Landscape architecture
- Centre for Business and Social Entrepreneurship
- Research Shop
• Project coordinator; Post-docs (2); project managers (5-7); Students (25)

• Students apply and commit to 2 semesters; meet every 3 weeks; Staff supported/peer learning

• Professional skill development (proj mgt, grant writing, negotiation)

• Contribute their own expertise

• “Rapid response”; complex projects in teams; link to other resources
**Intern team**

“rapid response” research

- Identify/scope potential research projects
- Supervise and support project managers
- Identify relevant faculty expertise
- Broker relationships and responses

**PhD candidates/project managers**

- Help scope projects
- Conduct team based research
- Supervise & mentor more junior students
- Supervise rapid response

**Community Collaborations**

- Multiple organizations & individuals (5-35)
- Addressing substantive complex issue (poverty, food security, housing)
- Grassroots or mandated

**RS staff researchers**

- Identify/scope potential research projects
- Supervise and support project managers
- Identify relevant faculty expertise
- Broker relationships and responses

**Collaboration Sub Committees**

- e.g., Food Access

**Faculty Researchers**

- Consults, engaged for funded research

**Grad student theses/papers**

**Undergrad service learning**

**KMb Interns**

- Create strategy; Format reports; website; social media

**Graduate students in CES course**

- Paired with RS interns with complimentary knowledge & skills

**RS Interns**

- Faculty Researchers
- Grad student theses/papers
- Undergrad service learning
- Graduate students in CES course
- KMb Interns
- RS staff researchers
- PhD candidates/project managers
- Intern team
- Community Collaborations
- Collaboration Sub Committees
The Bonn Science Shop

- Established 1984
- About 50 members
- Non-profit-association
- non-university based
- Budget 3,0 Mio EUR
- No external funds
- Demand driven and creating own fields of work
- Partner in EU funded projects: "SCIPAS", "ISSNET", "TRAMS", "CIPAST", "EFSUPS", "Soufflearning" and "PERARES"
- Professional (paid) staff of 30 in flat, collective structure - + 30 freelancers
**Projects**
- Co-operation projects
- Own projects
- Demand driven
- Calls and Tenders

**Public Services**
- Library
- Publications
- Consultations
- Mediation

**Paid Services**
- Journals
- Analysis
- Expert reports
- Trainings
- Lectures
- Publications
The Bonn Science Shop
Decision Making Structure

Council of Delegates (Delegiertenrat)

Members

Elected Delegates

Board

Employees

Committee

Management Team

Decision

Committee
University of Groningen

Since 1614
Classical University
27,000 Students
5,000 Staff

5 Science Shops (since 1979)
- Business Management and Economics
- Medical Faculty
- Languages, Culture, Communication
- Didactic and Educational Studies
- Mathematics and Natural Sciences
Internal network Science Shop Wageningen

- Science shop
- Rector
- Research & Education
- Communication
- HRM
- Finance
- Advisory council
- Agrotechnology & Food Sciences Group
- Animal Sciences Group
- Plant Sciences Group
- Environmental Sciences Group
- Social Sciences Group
Communication Department Web Portal (& Internal Database):
- Intake form for new CSO partners, general info, examples
- PDF and media approach for finalised research

University of Stavanger: New CSOs come through Communications Departments
Student-assistants follow-up on the forms received and contact the CSOs.
Reports go to the CSO first and then CSO and Communications Department decide on PR.
Science shop and similar
Exercise 2a:
Your context to build from (as individuals)

1. What is your intention? (what is it you want to do; who is your primary “audience” – students, researchers or CS?)

2. What are your resources (tapped and un-tapped)? (people, money, relationships, attitudes, offices)
Exercise 2b: Dream your Science/Research Shop Model

1. Name your sciences shop (or call it science/Research shop!)

2. What is your process to build it? How participatory is process (or not)? Who/how/when will you engage them?

3. What are your biggest concerns in starting this new model?

4. Imagine you have full funding – how will it look and work in 5 years– draw it if possible!
Benefits “Science Shops”

› Empowered CSOs
› Enhanced learning for students, including social and political awareness, employability!
› Case materials/networking for researchers
› PR and social responsibility for institute
› Policy: Informed decisions

› Lobby & motivate with these arguments
› Start from pilots, find allies
Resources and Support (1)

• Institute for Community Engaged Scholarship
  [www.theresearchshop.ca](http://www.theresearchshop.ca)
  - Research reports by interns
  - P&T documents; presentations
  - Definitions (CES, KM, CE)

• Living Knowledge Network
  [www.livingknowledge.org](http://www.livingknowledge.org)
  – Tool box, magazines, newsletters, listserv (open for project development, advice, info, etc.); discussion
  – Checklists; drafts of agreements/contracts; advice on charging fees
Thank you!

- Pasted after this slide are the Flipcharts from the session
- ACTION RESEARCH CONSULTS TO COMMUNITY ORG
- COMMUNITY ARTS STUDIO; GARDEN; OPEN IN COMMUNITY (STORE FRONT)
- STUDENT FUNDED
- FUNDING, NEBULOUS, HANDSHAKES
- UNDERGRAD LEVIES; LINKS TO OTHERS
- COURSES FOR COMMUNITY COURTS

Neighborhood way
PARTNER SHOP

OPPORTUNITIES
SUPPORT COMMUNITY
SUPPORT STUDENTS
+FACULTY
SERVICE LEARNING
The way things should be

Community Goal

knowledge needed

from community

from outside

popular education

science shop

research/tech assistance