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Faculty of Science

University of Copenhagen reaches out to society: science communication examples

- Jan Sølberg
- Deputy Head of Department
- Department of Science Education
- University of Copenhagen

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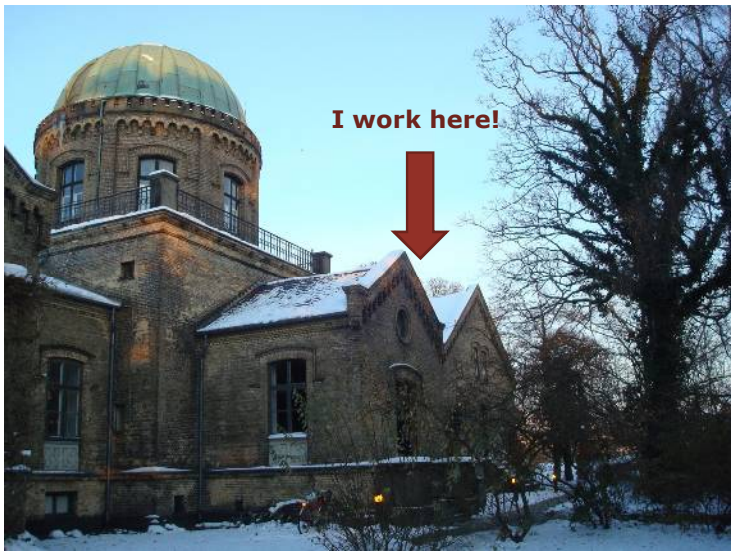
Night at the Observatory



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Today's talk

- A Danish historical perspective
- Examples from the University of Copenhagen
- Science Communication in a broader perspective

"Possible risks are endlessly debated, while deeper questions about the values, visions, and vested interests that motivate scientific endeavour often remain unasked or unanswered" (DEMOS, 2004).

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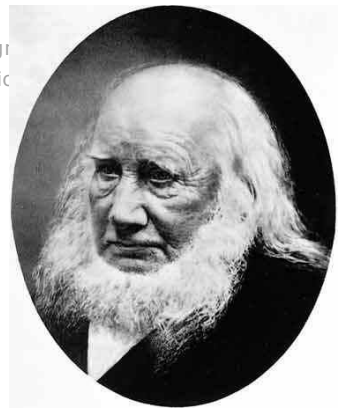
Danish Science Communication in a historical perspective

- 18th century: Anti-authoritan movement
- 1970's: Public Engagement and Participatory Desig
- 1985+: Institutionalisation of Science Communicatio
- 2001: Return to Public Understanding of Science
- 2003: The "Third Leg"
- Today



N.F.S. Grundtvig, 1783 -1872,
Danish pastor, author, poet, philosopher, historian, teacher, and politician

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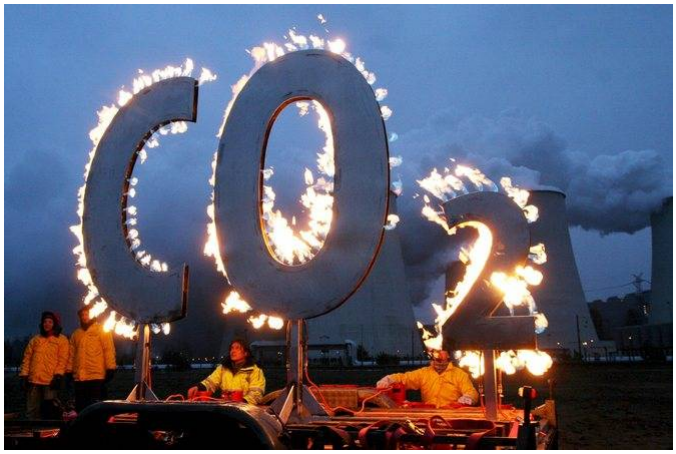
Public Engagement and Participatory Designs



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TEKNOLOGI-RÅDET
THE DANISH BOARD OF TECHNOLOGY

THE DANISH COUNCIL OF ETHICS

Culture of debate and engagement rather than mere dessimination of knowledge

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Parcipatory Consensus Conferences

Censensus Conference format

- 10-25 "citizens" (not experts) are selected plus 1 facilitator
- First stage: Preparation and deliberation
- Second stage: Conference including experts
- Final stage: Recommendations

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- Today

"…give the Danish population an understanding of the importance of this area for our future welfare, environment, health and growth" (Ministry of Science, Technology, and Innovation, 2004

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Danish Science Communication in a historical perspective

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- 2003: The "Third Leg"
- Today!

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Science Communication activities of the University of Copenhagen

- ***For potential students:***
  - **Class visits**
  - **Open house**
  - **Internships**
- **"Research Sprouts"**

For schools:
Circus "Naturally"
Eastersea Aqaurium
" Day of Research"
Annual Science Week
School services

For the public:
Museums
Parks and gardens
"Day of Research"
Annual Science Festival
" Night of Culture"

Other:
Education
International partnerships
Public-private partnerships
Maintaining collections

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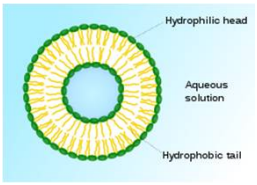
Examples

- ***For potential students:***
  - **Class visits**
  - **Open house**
  - **Internships**
- **"Research Sprouts"**

”Research Sprouts”



FORSKERSPIRER

TA’ FORSKUD PÅ FREMTIDEN

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Examples

For the public:
Museums
Parks and gardens
”Day of Research”
Annual Science Festival
” Night of Culture”

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Natural History Museum(s)

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- Exhibitions
- Research
- Maintaining collections
- Education
- National- and international collaboration

MEDICAL MUSEION

The Culture of Medicine - yesterday, today, tomorrow

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Annual Science Week

	2008	2009	2010	2011
Schools in DK	32%	36%	34%	34%
High schools in DK	56%	63%	62%	64%
Research talks	361	497	477	536
Classes in mass experiment	1000	1000	1300	1300

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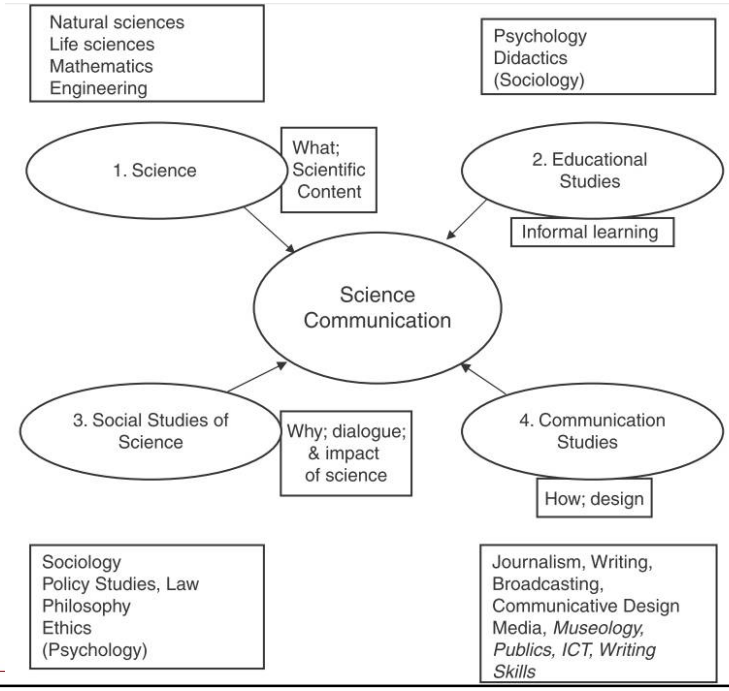
Mass experiments with up to 20.000 students

Girls taste better than boys!

Examples

Other:
Education
International partnerships
Public-private partnerships
Maintaining collections

Education



From Mulder et al. 2008

International partnerships

- E.g.:
- Nordic Center for Earth Evolution (NordCEE)
- Towards the European Distributed Institute of Taxonomy
- BCGI - Botanic Gardens Conservation International
- Consortium of European Taxonomic Facilities
- Synthesis of systematic resources
- Global Biodiversity Information
- Flora of Ethiopia
- Tree of Life
-

Public-Private partnerships

Experimentarium®
- DU BLIVER SJOVT NOK KLOGERE

Dansk NATURVIDENSKABS-formidling
Begejstring for naturvidenskab

NTS-CENTERET

Examples

For schools:
Circus "Naturally"
Eastersea Aquarium
" Day of Research"
Annual Science Week
School services

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Circus "Naturally"

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School service

10.000+ Visitors from schools
6000+ visitors from high schools

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City Under Water

Making social scientific issues visible

Skoletjenesten

Final thoughts and perspectives

"Work to promote scientific literacy so everyone is up to speed, empowered and ready to contribute to the great debates about science, technology and the future? No. Invite them to participate, and really mean it, and they will find the motivation to become as scientifically literate as you, or rather they, please." (Turney, 2003)

Challenges for the future
(e.g. climate, power supply, food, health, environmental issues, emerging technologies)