

Open Science and Credibility in Society (Room 2.40)

Speakers:

Paul Wouters (Chair)

David Sweeney

Sarah Chaytor

Open Science and Credibility in Society

Paul Wouters (Chair)

Dean of Social and Behavioural Sciences, Leiden

University, The Netherlands

Dilemmas of Open Science

Paul Wouters, Coordinating Dean Open Science
Karlijn Hermans, Open Science coordinator

18 October 2023



Universiteit
Leiden

Open Science and Public Trust

- Open Access to scientific and scholarly information and data will *not* increase public trust in science, social science or the humanities
- On the contrary: (if the information is read at all) it may very well undermine public trust because it enables to take isolated scientific findings *out of context*
- Moreover: decontextualized scientific information will make it more difficult to appreciate the *meaning of uncertainty* in scientific and scholarly knowledge practices

Momentum for Open Science and Recognition & Rewards

- Open Science momentum in the Netherlands
 - National Program Open Science with national OS ambitions and rolling agenda
 - Continued as Open Science NL (linked to NWO) with support from the government
 - International frontrunner Open Access (78% of scientific publications with a Dutch author)
- Recognition and Rewards momentum in the Netherlands
 - (International) Coalition for Advancing Research Assessment (CoARA) with Dutch chair

nature

Explore content ▾ About the journal ▾ Publish with us ▾

[nature](#) > [comment](#) > article

Published: 22 April 2015

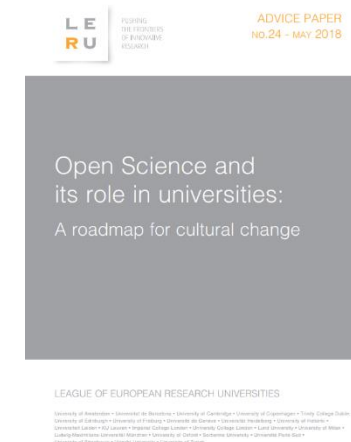
Bibliometrics: The Leiden Manifesto for research metrics

[Diana Hicks](#)  [Paul Wouters](#), [Ludo Waltman](#), [Sarah de Rijcke](#) & [Ismael Rafols](#)

Nature 520, 429–431 (2015) | [Cite this article](#)

30k Accesses | 1016 Citations | 2140 Altmetric | [Metrics](#)

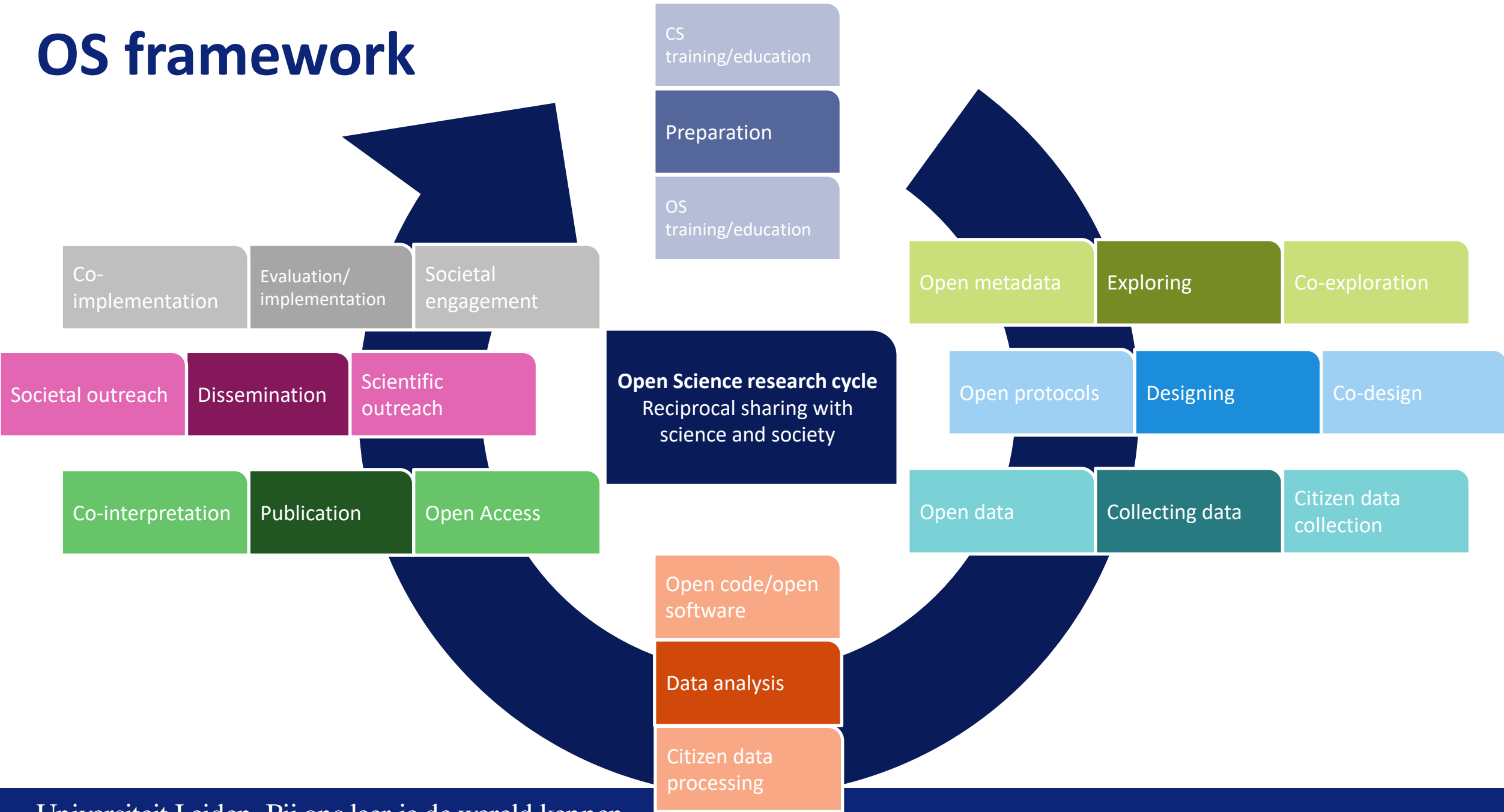
Use these ten principles to guide research evaluation, urge Diana Hicks, Paul Wouters and colleagues.



Definitions of Open Science

- Unesco Recommendation: Open Science is defined as an inclusive construct that combines various movements and practices aiming to make multilingual **scientific knowledge openly available, accessible and reusable** for everyone, to **increase scientific collaborations** and sharing of information for the benefits of science and society, and to **open the processes of scientific knowledge creation, evaluation and communication to societal actors** beyond the traditional scientific community.
- NWO: Open Science is the movement that aims at **more open and collaborative research practices** in which publications, data, software and other types of **academic output are shared** at the earliest possible stage and made available for reuse. Open Science leads to greater scientific and societal impact.
- Leiden (working definition): **Open Science is the movement towards more open and collaborative research practices in which all types of academic output are shared at the earliest possible stage during the entire research process, aiming at reciprocally sharing knowledge with scientific and societal actors.**

OS framework



Open Science ambitions at Leiden University*

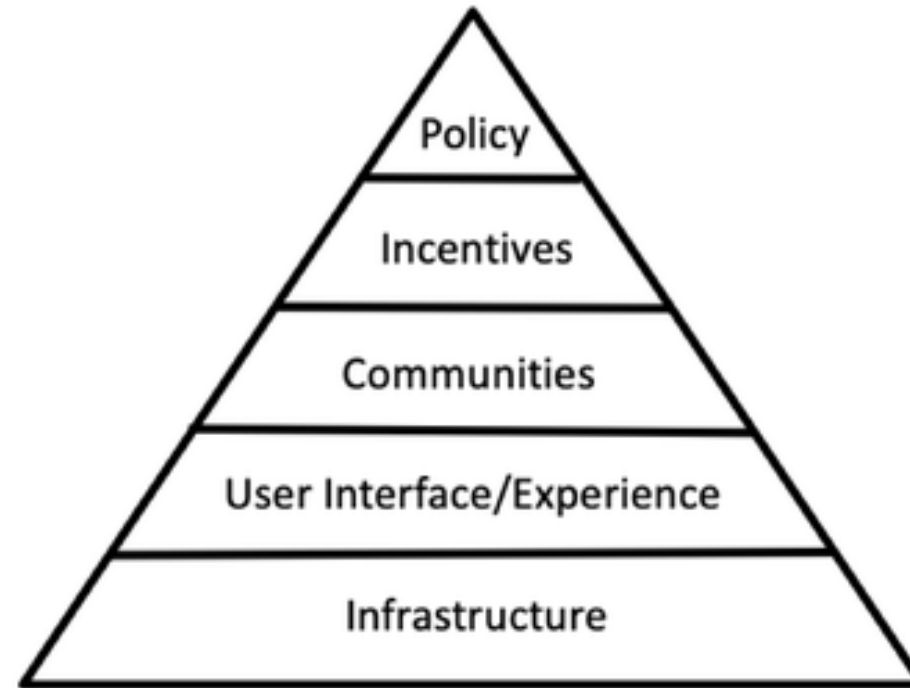
- Towards 100% Open Access
- Towards FAIR data and data management support
- Towards open research methods and software
- Towards more societal engagement by means of Citizen Science



*OS programme ambitions and pillars further defined in [Open Science ambition document](#)

How to change research culture and behavior

- **Connecting** different Open Science initiatives and programs throughout the university
- Driving **evidence-informed** Open Science
- Enhancing **visibility** of Open Science



Make it required
Make it rewarding
Make it normative
Make it easy
Make it possible

Nosek, 2019

Creating a critical mass and work simultaneously bottom-up and top-down (Armeni et al., 2021; [‘Towards wide-scale adoption of open science practices: The role of open science communities’](#))

Support Open Science Community Leiden

- Support Open Science Community Leiden as learning community to improve skills and support of researchers
- Share experiences with Open Science practices via activities such as OS coffees
- Important for changing the academic culture and peer-to-peer teaching of Open Science practices
- Channel efforts at national level: OSC-NL

- Enhance visibility → upcoming
- Expand OSCL throughout university → faculty ambassadors
- Strengthen collaboration with OS and AiM programme



Academia in Motion at Leiden University

Open Science and Recognition & Rewards integrated within Academia in Motion

- Transition to a University community where quality, collaboration, an open academic culture, integrity and leadership are core. This movement closely reflects the University's new societal role, where science is not kept at a distance, but is conducted at the heart of and often in partnership with society.
- Academia in Motion is not an end in itself, but is rather a cultural transition and a logical consequence of the changing role of academia.
- University wide programmes at Leiden University
- Funding for 5 years (2023-2027)
- Dedicated programme leaders work directly with University Board, stakeholders with expertise within the university (university library, faculties, institutes, research support services) and communities of researchers such as the OSCL

The value of open science for public trust

- It is not the information that counts but the social relationships and the social network
- Open science may contribute to increased (or sustained) trust in the knowledge community if they are seen as part and parcel of society at large (and not as part of some elite)
- Therefore, we need to build more flexible knowledge communities in which academics can more freely share their knowledge (not hindered by university bureaucracy). Hence Academia in Motion.
- This is a program of change of (the role of) academia: open science is only valuable if it transforms the way the universities and research institutes work and share
- And how will open science relate to the global configurations of resources and power? Will it increase the existing inequalities or be really inclusive re the Global South?

For any questions or comments, feel free to reach out!

Paul Wouters – p.f.wouters@cwts.leidenuniv.nl



**Universiteit
Leiden**

Open Science and Credibility in Society

David Sweeney

*Former Executive Chair, Research England, United
Kingdom*



UNIVERSITY OF
BIRMINGHAM

Open Science and Credibility

David Sweeney

AESIS 18th October 2023

The World as it Used to be

- **Give us the Evidence – show us the Data**
- **Logical Argument, transparently delivered**
- **Accessibility, Public Understanding and Discourse**
- **Importance of ethical approach**
- **But but but.... ‘My research is much better when it channels my passions’**
- **Academic as dispassionate actor or team player**



The World as it is Now

- **Polarised and Politicised**
- **Credibility is in the eye of the beholder – not our judgement.**
- **The lens of your own reality – assessing everything by how you believe the world is, and sceptical about evidence which suggests the world is different from your belief system**
- **Mismatch of expectations about success criteria, critique v solutions**



Responding

- **Understanding motivations, drivers and objectives**
- **.... And setting out your own**
- **Teasing out arguments in the light of others' perceptions**
- **Identifying and acknowledging particular views of complex issues**

Conclusions

- **It's all very difficult**



Robert Anderson (2010)

‘A particular social dilemma in Britain, exacerbated by marketization and the introduction of fees, is how to avoid returning to a situation where the best universities, still holding to the traditional 'idea of the university', are the preserve of social privilege. What policies should be pursued to preserve

democratic access to the best higher education and to match individual talent to intellectual

Open Science and Credibility in Society

Sarah Chaytor

Director of Strategy & Policy, University College

London, United Kingdom

Recommendation

Parallel session: Open Science and Credibility in Society (Room 2.40)

Recommendation: “Burst the bubble. Credibility is in the eye of the beholder. In order to develop true long-term credibility in larger sector of society, universities should transform their ways of working in ways which engage with those who have very different world-views. Value not only academic knowledge but other forms of expertise (broadly defined) on equal terms. Take co-creation very seriously. Transform the academic reward and recognition system so academics get the time to spend on public engagement.”