The Intersections between DORA, Open Research and Equity

Let’s change what we value in research.

Sign DORA

Stephen Curry
Imperial College and DORA

Edinburgh Open Research Conference | Edinburgh/Online | 27 May 2022
Science’s new social contract with society

Michael Gibbons

Under the prevailing contract between science and society, science has been expected to produce ‘reliable’ knowledge, provided merely that it communicates its discoveries to society. A new contract must now ensure that scientific knowledge is ‘socially robust’, and that its production is seen by society to be both transparent and participative.

https://www.nature.com/articles/35011576
We have allowed scholarly publishing to come into opposition to the public interest

“our research ecosystem provides no incentives for publishing reliably, rapidly or openly – all features that one might hope to see in a system that works effectively. Despite a decade or more of talk about open access, [...] we are still mired in technical and cultural debates that remain largely internal to the ivory tower.”

How do we talk about what we value?

“We need to begin to tell stories that frame politics around genuine appreciation and social recognition for contributions to the common life and to collective well-being that go beyond how the market rewards you and how the market defines the value of your contribution.”

Michael Sandel
Dec 2018

https://www.youtube.com/watch?v=LCZhA-_1n4E
Market value in academia

Impact factors and university rankings have become normalised

Evaluation based on journal metrics reduces productivity
  • Chase for Journal Impact Factors slows publication
  • Positive bias in the literature (no place for sharing negative results)

Metric-driven hyper-competition in which only the result matters:
  • devalues other important academic activities – and academics
  • focuses on the ‘what’, not the ‘how’ or ‘who’
  • incentivises fraud, undermining public trust
Why don’t we value openness?

“I’m all in favour of open access/science but…”
- what about my career?
- what about the learned societies?
- what about the cost?
- what about predatory journals?

System vs Greater Good

“Despite personal ideals and good intentions, in this incentive and reward system researchers find themselves pursuing not the work that benefits public or preventive health or patient care the most, but work that gives most academic credit and is better for career advancement.”

Frank Miedema

https://blogs.bmj.com/openscience/2018/01/24/setting-the-agenda-who-are-we-answering-to/
A brief history of research assessment reform

May 2013

sfdora.org

Oct 2013

Science in Transition

Mar 2015

The Leiden Manifesto for research metrics

Jul 2015

The Metric Tide

Jul 2020

The Hong Kong Principles for assessing researchers: Reversing research integrity

Nov 2021

Towards a reform of the research assessment system

UNESCO Recommendations

Nov 2021

UNESCO Scoping Report

UNESCO Recommendations

Nov 2021

Report for GRC meeting
We need to talk about how open science can be better science

Preprints: faster communication
Focus on the content, not the container
Encourages open peer review
Questions of reliability and misuse?
More informed discussion about value of peer review & journals?

Open Access, Data & Code sharing: a global audience
Maximising a public good within & beyond the academy
Sharing + Scrutiny = Reliability
How to ensure equitable access for authors?

Open science: better for changing the world
e.g. Zika crisis, Covid-19, global challenges
Shared research values in an open science world: a proposal

Reliable, rapidly communicated, accessible, high-quality research that transforms our understanding of the world and can change it for the better.

Researchers who collaborate, who feel a duty of care to group members & colleagues, and a responsibility to the societies of which they are an integral part.

A research system that values the people within it, that cares about their quality of life, and that seeks out the creative vigour of diversity.
DORA: we are an important part of a bigger picture

The intersections between DORA, open scholarship, and equity

August 18, 2020

Introduction

The San Francisco Declaration on Research Assessment (DORA), published in May 2013, does not mention the term 'open scholarship.' And yet DORA and open scholarship are becoming increasingly entwined. DORA's ambition is to improve research evaluation practices but the practicalities of implementation make it impossible to separate the evaluation of research from questions about who and what research is for, who gets to be involved, and how it should best be carried out, all of which have to take account of the power dynamics that shape the scholarly landscape. Equally, progress towards open scholarship, which aims to make the products and processes of academic work as...
It’s complicated: understanding constraints on change

- External and internal drivers, each apparently reasonable in its own terms, conspire to create a toxic brew

- Individual stakeholders (funders, universities, researchers) are constrained by competitive forces

- To realise the vision of open science, we have to deal with these realities
DORA: the declaration

One general recommendation:

Do not use journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles, to assess an individual scientist’s contributions, or in hiring, promotion, or funding decisions.

17 positive recommendations for different stakeholders:

- funders
- institutions
- publishers
- data providers
- researchers

For institutions:

4. Be explicit about the criteria used to reach hiring, tenure, and promotion decisions, clearly highlighting, especially for early-stage investigators, that the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published.

5. For the purposes of research assessment, consider the value and impact of all research outputs (including datasets and software) in addition to research publications, and consider a broad range of impact measures including qualitative indicators of research impact, such as influence on policy and practice.

https://sfdora.org/read/
DORA: a declaration and an organisation

- sfdora.org
- >18,500 individuals and >2,400 organisations have signed
- International funding: 2 members of staff (plus an intern)
- Steering group with worldwide representation
- Strategy:
  - Promote the declaration to more signatories
  - Extend DORA’s global and disciplinary impact
  - Develop and promote best practice in research assessment
DORA: developing and promoting good practice

- Briefings
- Articles
- Webinars
- Conferences
- Workshops
- Curated resource library
- Case studies
- Community grants
- Collaborative work (e.g. policy discussions)
- Tools development (e.g. TARA)

https://sfdora.org/
DORA: we collaborate on tools and policies

Contributions to:
- the generation of knowledge
- the development of individuals?
- the wider research community?
- to broader society?

Resume for Researchers

CHARITÉ UNIVERSITY HOSPITAL, BERLIN

- Scientific contribution to your field
- Your 5 most important papers
- Contribution to open science
- Your most important collaborations

Guidance for research organisations on how to implement the principles of the San Francisco Declaration on Research Assessment

On this page
- The DORA report
- What we expect

RoRI Working Paper No.3
The changing role of funders in responsible research assessment:
progress, obstacles and the way ahead

November 2020

Produced in partnership with:

Resumen de Investigadores

Abriendo conversaciones sobre la evaluación del conocimiento de los investigadores

Contribuciones a:
- El desarrollo del conocimiento
- El desarrollo de las personas
- La comunidad de investigación más amplia
- La sociedad más amplia

Resume de Investigadores

- Contribución científica a tu campo
- Tus 5 trabajos más importantes
- Contribución a la ciencia abierta
- Tus colaboraciones más importantes
DORA latest: new tools and projects

- Interactive online **dashboard** to track adoption and implementation of responsible research assessment practices in institutions worldwide

- **Survey** of US institutions to understand attitude and approaches to research assessment reform

- An expanded **toolkit** of resources informed by best practice in the community

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**Project TARA**

Tools to Advance Research Assessment (TARA) is a project to facilitate the development of new policies and practices for academic career assessment.

- **Dashboard**
  - An interactive online dashboard that tracks criteria and standards academic institutions use for hiring, review, promotion, and tenure around the world.

- **Toolkit**
  - A toolkit of resources informed by the academic community to support academic institutions working to improve policy and practice.

- **Survey**
  - A survey of U.S. academic institutions to gain a broad understanding of institutional attitudes and approaches to research assessment reform.

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- **Alex Rushforth**, Center for Science and Technology Studies (CWTS) at Leiden University
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- **4Site Studios**
Scientists at odds - change is hard

Plan S is “too risky for science”, “unfair”, and “a serious violation of academic freedom”

“We are concerned that Utrecht’s new ‘recognition and rewards’ system will lead to randomness and a compromising of scientific quality....”

but

“The real issue is [...] that we should all unlearn to use unhelpful shortcuts and proxies, and re-learn how to undertake in-depth, contextual evaluation.”

“We yearn for frictionless, technological solutions. But people talking to people is still how the world’s standards change.”
Thank you

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Let’s change what we value in research.

Imperial College London
Does DORA work?

Responsible research assessment faces the acid test

The University of Liverpool is planning to make layoffs on the basis of controversial measures. How should the global movement for responsible research respond?

https://www.nature.com/articles/d41586-021-01991-z

How should Dora be enforced?

https://www.researchprofessionalnews.com/rr-news-uk-views-of-the-uk-2021-9-how-should-dora-be-enforced/
I am not my h-index (or my JIFs)

Key
1. Important discovery - now in textbooks
2. Important discovery - major pharma interest
3. Important discovery - textbooks revised
4. Valuable negative result & UG student training
5. Impactful policy paper (>33k PDF downloads)
6. Much discussed history and policy paper
7. See how much the h-index doesn’t count

Stephen Curry
Oct 2021