New ways to assess the quality of science and scientists and the role of African open access journals

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AJOL, ASSAf, DOAJ, EIFL, LIBSENSE and UCT initiative for African journal editors and publishers
Webinar series 2022
The assessment system is intimately connected to the Western publishing system.

The Western publishing system is controlled by shareholder companies.

- The publishing system has to change.
- The assessment system has to change.
- Scholarly communication needs to be controlled by the scholars.
Research excellence is a neo-colonial agenda
And what might be done about it

in the context of post-colonial and transitional countries research excellence is particularly dangerous because it represents a neo-colonial agenda, one in which powerful actors at the traditional centres of western scholarship are imposing systems, infrastructures and services that will enable expropriation and dominance

an over-emphasis on international, or non-local, connections is damaging to research systems and society more broadly. The “Research Excellence” agenda systematically privileges and reinforces connections between local knowledge production and “international” power centres


https://www.youtube.com/watch?v=11wfBSZl3Fl
The research excellence idea thrives through metrics and keeps the western dominated publishing system in place.

Metrics are controlled to a great extent by for profit western publishing companies.

Metrics serve to a large extent as a way to market the publishers product and increase or assure profits for the shareholders.

Metrics = citation scores, Impact factor, Ranking, Nr of publications.

English as “the” language of science puts non native English speakers at a disadvantage.

Metrics is biased for English language scholarly journals and articles.
Decolonising the Global Publishing Industry

Ram Bhat
Simidele Dosekun
Florence Piron
Godwin Siundu
Elizabeth Walker

Wednesday 27 January 2021
2:00pm - 3:15pm (GMT)

Livestream:
Zoom and Facebook

https://youtu.be/XjQjdjULLd8
Quality assessment needs to be contextualized

One world, many knowledges
Regional experiences and cross-regional links in higher education

Edited by Tor Halvorsen and Peter Vale

Copies of this book are available for free download at www.africanminds.org.za and http://sanord.net
during a conversation, about taking time to reflect, about rediscovering ‘the lost art of thinking’. Today, society keeps gathering knowledge faster than it achieves wisdom. Those who succeed are those who manage to find structure and exploit the powers of wild knowledge – the untamed tangle of data, learning and experience that flourishes in our lives and courses through our minds. This is an attempt to open the doors to what we actually know, shed light on the unknown knowns, and uncover all that is left out and lost in our day-to-day rat race. These are the fields we know are important but we cannot grasp; the things that can make a real difference. It is about the here and now.
WHAT IS IMPORTANT?
FACTORS INFLUENCING RESEARCH ASSESSMENT

Cultural differences

Languages

Research topics

Global distribution of journals and publishing platforms

Educational resources

Woman scientists
San Francisco Declaration on Research Assessment

There is a pressing need to improve the ways in which the output of scientific research is evaluated by funding agencies, academic institutions, and other parties. To address this issue, a group of editors and publishers of scholarly journals met during the Annual Meeting of The American Society for Cell Biology (ASCB) in San Francisco, CA, on December 16, 2012. The group developed a set of recommendations, referred to as the San Francisco Declaration on Research Assessment. We invite interested parties across all scientific disciplines to indicate their support by adding their names to this Declaration.

The outputs from scientific research are many and varied, including: research articles reporting new knowledge, data, reagents, and software; intellectual property; and highly trained young scientists. Funding agencies, institutions that employ scientists, and scientists themselves, all have a desire, and need, to assess the quality and impact of scientific outputs. It is thus imperative that scientific output is measured accurately and evaluated wisely.
The aim is for research to be evaluated based on its intrinsic merits rather than on the number of publications and where these are published.

Scoping report on research assessment. European Commission

Paris Call on Research Assessment

- Calls therefore for a research assessment system that:
  - rewards quality and the various impacts of research;
  - ensures that research meets the highest standards of ethics and integrity;
  - values the diversity of research activities and outputs such as publications and preprints, data, methods, software, code and patents, as well as their societal impacts and activities related to training, innovation and public engagement;
  - uses assessment criteria and processes that respect the variety of research disciplines;
  - rewards not only research outputs, but also the appropriate conduct of research, and values good practices, in particular open practices for sharing research results and methodologies whenever possible;
  - values collaborative work, as well as cross-disciplinarity and citizen science, when appropriate;
  - supports a diversity of researcher profiles and career paths.

https://osec2022.eu/paris-call/

All presentations and video’s are freely available
quite deliberately over-state their meaning. Indeed, each of the ‘big three’ global rankings (ARWU, QS and THE WUR) claim to reveal which are the ‘top’ universities (despite using different methods for reaching their different conclusions). However, given the many and varied forms of higher education institutions on the planet, none of these high-profile rankings articulates exactly what their ‘top’ universities are supposed to be top at. The truth is that the ‘top’ universities are mainly top at being old, large, wealthy, English-speaking, research-focussed and based in the global north.

https://blogs.lse.ac.uk/impactofsocialsciences/2021/05/10/love-dora-hate-rankings/
THE NON WESTERN VIEW?

What do African scientists think??

- A 2021 report from the African Center for Economic Transformation (ACET) advises policymakers on the importance of rewarding regional collaboration in research, such as the Songhaï Center in Benin, which “conducts training, production, & research, combining modern & traditional methods.”

How can research practices be transformed through open science? Why should research outputs be considered based on intrinsic merit rather than proxy-measures of quality like journal impact factor or h-index? How are current systems of research valuation biased toward the global north? (DORA LIBSENSE Webinar March 2022)
ASSESSMENT IN OPEN SCIENCE
DIVERSE QUALITY CRITERIA ---- NO RANKING

Quality criteria should include more than just citation metrics.

Ranking promotes inequity and maintains the dominance of the Big Publishers.

Ranking drives the publish and perish culture and frustrates many early career scientists.

Ranking, impact factor and other citation metrics are controlled by commercial companies.

Ranking should be replaced by new sets of quality criteria developed with the participation of scientists and be under community control.
ROOM FOR EVERYONE’S TALENT

Our ambition

We aim for a healthy and inspiring environment for our academic staff
Where all talents are valued: Teaching, research, impact, patient care
and good leadership in academia
Not only in The Netherlands
But all over the world!
Inclusive assessment

NWO wants to advance research with both scientific and societal impact. Therefore, research needs to be conducted by people with all kinds of different experiences. A diverse range of perspectives enables innovative and creative research.

NWO wants to optimise its evaluation processes and broaden the often limited ideal image of what a good researcher or a good proposal is. To facilitate this, NWO uses two videos for reviewers and committee members involved in the evaluation process. The videos provide information about implicit bias regarding this ideal image and provide practical suggestions, based on scientific research, to optimise the evaluation process.
PUBLISHING IN YOUR OWN LANGUAGE
Acknowledge the quality of works published in local languages

TOMA SUSO  Quote: “This is especially important for the Arts and Humanities”

End the use of inappropriate metrics:
all stakeholders should abide by the principles previously outlined in the San Francisco Declaration on Research Assessment and the Leiden Manifesto.

For research communities, it is urgent and vital to concretely consider how they wish evaluation systems to be adapted to eliminate pernicious incentives and to reward pertinent Open Science practices in their diverse circumstances.
7 Common types of peer review

1. Single Blind Peer Review
   Authors don’t know who the reviewers are. But the reviewers are aware of the authors’ identity when they decide to accept or reject the document for review as well as throughout the review process.

2. Double Blind Peer Review
   The journal editor does not reveal the reviewers’ credentials to the authors and vice-versa. So both parties are not aware of each other’s identity. All indicators of identity such as names, affiliations, etc. are removed.

3. Open Peer Review
   The authors and peer reviewers both know each other’s identities. This system allows the peer reviewers’ comments as well as the authors’ responses to be published along with the final manuscript.

4. Collaborative Peer Review
   This type of peer review occurs on a platform provided by the journal where authors & reviewers can discuss how the paper can be improved. Often, reviewers’ identities are concealed from authors but may be revealed at the time of publication.

5. Third-Party Peer Review
   Authors get their manuscripts reviewed by an independent peer review service before they approach any journal. Based on the reviews, they make changes to the paper and then submit it to the journal.

6. Post-Publication Peer Review
   The journal provides a platform such as a discussion forum for the post-publication commenting. Once the published paper is available on the platform, anyone who reads it can post their comments or views about the paper.

7. Cascading Peer Review
   When a manuscript is rejected after review because it is of low priority for the journal at the moment or because it is not interesting for the journal’s target readers, the journal may suggest that the authors submit the manuscript to an alternate journal along with the reviews. Often, the new journal is part of the publisher’s portfolio.
Perhaps the biggest innovation is that of the increasing trend of ‘open peer review’ (Parks and Gunashekar 2017), which itself has become a quite convoluted term (Ross-Hellauer 2017a; Ross-Hellauer, Deppe, and Schmidt 2017) within part of broader developments in ‘open science’. It has been diagnosed to refer to seven key aspects of peer review: open identities, open reports, open participation, open interaction, open pre-review manuscripts, open final-version commenting, and open platforms (or ‘decoupled review’) (Ross-Hellauer 2017a). Journals and scholarly publishers are now experimenting with various combinations of these traits, in order to find what works best in
MEASURING IMPACT
NEEDS
CONTEXTUALIZING
Webinar: LIBSENSE and DORA discuss open science and research assessment reform in Africa

WORKSHOP
Building Research Assessment Reform into Regional Open Science Policy in Higher Education Institutions

Live Wednesday, March 2, 2022 | 1:00 PM UTC

Dr. Violet Makuku
Quality Assurance Specialist
Association of African Universities, Ghana

Dr. Frederick Ato Armah
Director of the Directorate of Research Innovation and Consultancy
University of Cape Coast, Ghana

Dr. Laura Ravelli
Coordinator
Latin American Forum for Research Assessment, Argentina

https://sfdora.org/read/
Open science aims to make the products and processes of scholarly work accessible to as many stakeholders as possible. However, shifting scholarly culture to value the open sharing of software, data, protocols, and research findings also requires changes in how researchers and their outputs are assessed and rewarded. Importantly, reform to both research culture and assessment practices cannot be implemented using a “one size fits all” approach—such efforts must account for context if they are to be successful (e.g., region, language, discipline, etc.).

PUBLISH AND PERISH?
The drive that all of us feel the need to publish in a small number of journals produces bias in content and leaves many talented people behind.
publication pressure

Publish & Perish

unreliable research data
more plagiarized content
over-reliance on peer review
false sense of supremacy

excellence as a neocolonial agenda*

marginalization of non-Western knowledge

* Cameron Neylon http://dx.doi.org/10.17613/bta3-6g96
TOO SIMPLE TO JUST BLAME THE PUBLISHERS

WHY ARE ALL OF US COMPLYING WITH THIS SYSTEM?

SCIENTISTS
UNIVERSITY COUNCILS
FUNDERS
GOVERNMENTS
PRACTICE OPEN SCIENCE: SHARE, EVALUATE AND COLLABORATE
Open science

Open Science methods need to be part of the Curriculum at Universities

OPEN SCIENCE = JUST SCIENCE DONE RIGHT

Publishing should ideally be done in community controlled journals and platforms

Science should be assessed by criteria independent from publishing venues and languages
HOW TO PROCEED

We are not there yet

But the picture of what good science should look like is emerging

It will involve the collaboration of many open infrastructure providers

It will involve a change of mind of scholars, publishers and policy makers
A FINAL WORD OF WARNING

Open science, done wrong, will compound inequities

Research-reform advocates must beware unintended consequences.

doi: https://doi.org/10.1038/d41586-022-00724-0

Failing to address structural inequalities directly means that the advantages of those who are already privileged will grow, especially given that they have the most influence over how open science is implemented.

Another analysis found that authors of OA articles were more likely to be male, senior, federally funded and working at prestigious universities (A. J. Olejniczak and M. J. Wilson Quant. Sci. Stud. 1, 1429–1450; 2020). Worse still, citation advantages linked to OA mean that the academically rich will get even richer.
Thank you!

Tom Olyhoek, DOAJ Editor-in-Chief