Aligning research assessment with Open Science

Open Science : from policy to practice

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Diverging incentives at the researcher level

Unclear turn for my university

Coalitions for advancing research assessment



Researcher diverging incentives

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Opening science takes time & energy

- Preregistration, Data Management Plans
- Sharing research outputs
 - papers and books, data, software source codes
- Sharing and opening the research processes
- Developing new skills to do that

¹Hostler, T. J. (2023). The Invisible Workload of Open Research. Journal of Trial & Error.



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Incentives drive any woman or man's work

An academic's job typically consists of a large number of activities in addition to research.²

- Overall tendency to underestimate open research additional workload
- Researchers need clear incentives to optimize their time and workload



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Researcher diverging incentives

Motion speed towards Open Science varies

Assessment diversity in a researcher's life

Individual assessment

- PhD
- Hiring
- Promotion

Collective assessment

- Research laboratory
- Research performing organization

Project assessment

• A large variety of project funders



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Diverging incentives

- A variety of assessors
- A variety of incentives



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Researcher diverging incentives

Diverging incentives get researchers angry

Open Science acceptation level gradually rises

A few years ago in my discipline and country

- Open Science rejection
- Hiring & promotion expectancy not met

Today

- Open Science benefits starting to be understood
- Angry researchers
 - Funding agencies have high Open Science expectations
 - Collective & individual assessors have lesser ones



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Unclear turn for my university

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Research assessment turn is ahead

Reasons and necessity clearly understood

- Diverging incentives
- Lack of reward for many research outputs
- Lack of reward for many research activities

Open science is only a part of the scene

- Scientific Integrity issues
- Research valorisation, economic or not
- · Communication outside academia



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OK for a change, but where to ?

- Consensus that a change is needed
- No clear idea, nor consensus, on the changes to be made

A question of skills and time

- An assessment skill gap to fill for assessors
- Assessing better takes more time
- · Assessors not so easy to find

A need for coordination with research partners

- · Researchers are assessed by various organisms in France
- They are also assessed worldwide



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Turn to be carefully negociated

Change will only happen if conducted together

Coalitions needed

- Nationwide
- European wide (at least)



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Evidenced based definition of pertinent criteria needed

- Quality based
- · As objective as possible
- · Adapted to each discipline

Coordinated training of assessors needed

- Ensure as large coordination as possible
- Provide mutual training
- Help find assessors



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Coalitions for advancing research assessment

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French assessment diversity

Hiring in universities : two uncorrelated steps

- Discipline specific nationwide step
- Position specific local step

Promotion in universities : two steps with the same file

- Discipline specific nationwide step
- Trans-discipline local step

National research organizations

• Each has its own assessment process

Over a hundred ways of performing assessment

• Coordination on its way



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Coordination on its way



Haut Conseil de l'évaluation de la recherche et de l'enseignement supérieur

- Nationwide
- Assesses all collective research organizations
- Great tool for coordination





National funding agencies diversity

- Leader : Agence nationale de la Recherche
- Common roadmap towards Open Science
- Assessment coordination on a good start

University or national organism specific projects

• Each has its own specific assessment





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Coalitions for advancing research assessment

Let's coordinate

A nationwide coordinated working group

- Hcéres
- Universities
- National research organisms
- Funding agencies
- Any other institution signing DORA

A year old coordination

- At the heart of the organization of the 2022 Paris Open Science European Conference
 - Launched the Paris Call on Research Assessment
- Evolving towards the CoARA French national chapter





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European-wide, and beyond, coalition

- Bottom up building
- European initiative, though opened worldwide
- Around 500 institution members today
- Months old : work is starting
- May respond to the majority of the previous concerns





Coalitions for advancing research assessment

Tampering with the heart of the machine

Tampering with assessment can have unforeseen effects

- It already had
- Assessment is a the heart of an extremely complex system
- Extreme caution must be taken





CoARA tenth commitment

Evaluate practices, criteria and tools based on solid evidence and the state-of-the-art in research on research, and make data openly available for evidence gathering and research

Research is needed, on research assessment

- Metascience initiatives already exist
- In many countries and disciplines

Cross-countries and cross-disciplines coordination is needed

- · To fuel research assessment advancements
- To fuel Open Science policies
- To fuel knowledge for unforeseen applications





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[...]

The G7 also supports immediate open and public access to government-funded scholarly publications and scientific data, and supports the endeavors of the scientific community to address challenges in scholarly publishing for broader sharing of appropriate scientific outputs.

To this end, we support the efforts of the G7 Open Science Working Group in promoting the interoperability and sustainability of infrastructure for research outputs, supporting research assessment approaches that incentivize and reward open science practices, and encouraging "research on research", aimed at helping to shape a more effective evidence-based research policy.



