Introducing the 2022 Project TARA tools to support responsible research assessment

25 October 2022

Code of Conduct

DORA is a community with shared aspirations to improve academic assessment, and we are all working towards the same goal.

✓ Participants are expected to follow the Community Conduct Rules of DORA's administrative entity, the American Society for Cell Biology

✓ Keep comments constructive, collegial, and to the point

✓ Be respectful of everyone on the call

✓ Use the **chat** to contribute to the discussion

✓ The first portion of this meeting will be recorded to be shared on DORA's site

Agenda

- **Introduction**

- **Introducing two tools for responsible research assessment**
  - Strategies on how to debias committees and deliberative processes.
  - Ideas on how to incorporate a wider range of contributions in evaluation policies and practices.

- **Q&A about 2022 tools**

- **Introducing 2023 toolkit ideas**

- **Community discussion on 2023 tools**

- **Closing remarks and next steps**
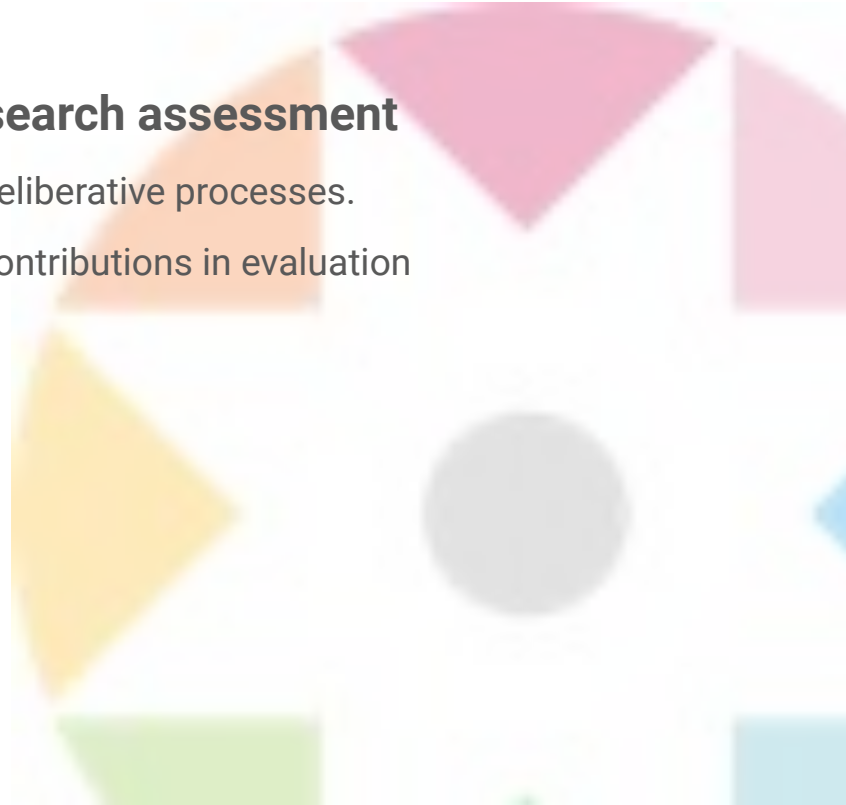
Tools to Advance Research Assessment (TARA) is a project to facilitate the development of new policies and practices for academic career assessment

www.sfdora.org/project-tara/

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DORA

Steering
Committee
Chair

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DORA

Acting Program
Director

Sarah de Rijcke
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Professor and CWTS
Director

Alex Rushforth
Leiden University

Researcher

Ruth Schmidt
Illinois Institute
of Technology

Associate
Professor

Core Project TARA Team

Project TARA consists of three main components:

An interactive online dashboard

A survey of U.S. academic institutions

A toolkit of resources

Update on survey and dashboard development

Dashboard

- **2021 - 2022: Scoping events and data collection**

- **2022 - 2023: Web development**

- **Spring 2023: Public release**

Survey

- **2021 - 2022: Survey development and distribution**

  - **Thank you to all community members who participated in the survey!**

  - **Ongoing: Community Interviews with U.S. academic staff who have experience with evaluation policies and practices**

- **2023: Results to be shared**

Two tools for 2022

1. Debiasing committee composition and deliberative processes

2. Building blocks for impact

DEBIASING COMMITTEE COMPOSITION AND DELIBERATIVE PROCESSES

DORA

It is generally recognized that more diverse decision-making panels make better decisions: including more perspectives **reduces bias, increases transparency, and exposes more individuals to how decisions are made.** But old habits die hard, and increasing the diversity of committees demands behavioral change. Here are some strategies that can help.

Diversify across characteristics to support a range of perspectives
While increasing racial and gender representation is critically important, people from other less-represented groups—like first-generation or early career academics, or those with cross-disciplinary experience—can also invite new and valuable perspectives.

Taking a portfolio view
Keeping the bigger picture in mind can protect against the common tendency to make individual decisions, each reasonable in isolation—the so-called "isolated choice effect"—that collectively reinforces familiar norms or standards of decision-making.

Overcome "two-kenism[1]" tendencies
Research indicates that committees stop seeking diversity after selecting two underrepresented individuals, feeling like they've "checked the box." Making diverse representation less like a quota to be filled can also reduce the perception that those individuals must represent entire segments rather than their personal expertise.

Connect committee composition to outcomes through representation of those who will be affected
Deliberately inviting perspectives from those who will be on the receiving end of policy or directly impacted by decisions ensures that issues which might otherwise go unseen have the chance to be addressed.

Fostering true diversity of opinion
Non-traditional participants may fear judgment or feel a need to check themselves when making suggestions that run counter to established or commonly held views. More inclusive processes deliberately create space to consider all viewpoints, with shared goals in mind.

Transparency invites trust
When decisions about who's included (and who's not) are decided upon behind closed doors, even well-meaning intent can seem mysterious. In contrast, transparent and consistently applied criteria create a baseline and build a foundation of credibility.

Relying on self-identification or selection by leadership can reinforce existing biases
Research shows that making selection opt-out rather than opt-in can help boost inclusion of those who less comfortable with self-promotion[2], or those who may not seem like "obvious" choices.

Broadening who is exposed to processes can promote equity of opportunity
The ability to see behind the curtain may be especially useful for first-generation researchers or those new to the field. But recognize when committees become a form of added burden in the form of "invisible labor" for those already expected to pull more than their fair share.

Expanding a sense of what's possible
Traditions and historical norms are sticky in part due to status quo bias, but can also persist due to a perceived lack of other alternatives. Gaining exposure to new options by seeing what others have done can help overcome "the way things are done around here."

Question the norms about who is qualified to participate or contribute
When traditional or overly narrow forms of inclusion and exclusion—like seniority or rank—are used as criteria too early, they may leave out individuals who can provide important alternative points of view.

Debiasing deliberative processes can also reduce "business as usual" decision-making tendencies

Reducing **leadership bias**
• **Conduct and document "pre-briefs."** Spending time upfront to collectively craft the "rules of the road" for committee work can create alignment and serve as a shared touchpoint that everyone—no matter what their role of seniority—can point to if things go awry.
• **Make all votes count.** Seeing how others are voting can sway where we put our own chips. Techniques like anonymous voting can help reduce tendencies to conform to others' views or confirm safe choices rather than express true preferences.

Reducing **individual bias**
• **Question what we think we know.** Asking committee members to explicitly step through their thought processes and assumptions can surface and counteract "confirmation bias," or the tendency to prioritize data that reinforces existing preconceptions[3].
• **Even the playing field.** Consider strategies to reduce advantages of circumstance; providing interview questions in advance can equalize candidates, and using relative measures—such as progress from a starting point rather than judging absolute accomplishments—can gauge applicant quality more fairly.

Increasing **systems thinking**
• **Identify bias at a system level.** Efforts to reduce personal bias can put the burden on individuals to change, and can ignore how systems themselves are often designed to reinforce "hidden in plain sight" biases.
• **Think downstream.** Improving diversity through hiring will fall flat without equal investment in mentorship and retention.
• **Use structure to provide consistency.** Structured approaches—like interview protocols and pre-determined criteria—can increase confidence in comparison without resorting to solely quantitative measures.

[1] Chang, EH, D Chugh, M Akinola, and KG Milkman (2019) Diversity Thresholds: How Social Norms, Visibility, And Scrutiny Relate To Group Composition. Academy of Management Journal, Vol. 62, No. 1, 144–171. https://doi.org/10.5465/amj.2017.0440

[2] Chang, EH, KI Krajbich, A Rai, and KG Milkman (2020) The Isolated Choice Effect and Its Implications for Gender Diversity in Organizations. Management Science. 1-16

[3] He, JC, SK Kang, and K Lautens (2021) Opt-out choice framing attenuates gender differences in the decision to compete in the laboratory and in the field. PNAS 118(42) e2108337118 | https://doi.org/10.1073/pnas.2108337118

[4] Crane, M, M Cherry, and W Porter (2016) Invisible Labor: Hidden Work in the Contemporary World. University of California Press.

[5] Fernandez, J and JL Proctor. Disfluency disrupts the confirmation bias, Journal of Experimental Social Psychology (2012), http:// dx.doi.org/10.1016/j.jesp.2012.08.010

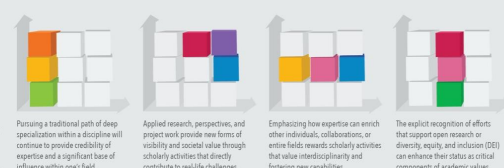**BUILDING BLOCKS FOR IMPACT**

DORA

Capturing scholarly "impact" often relies on familiar suspects like h-index, JIF, and citations, despite evidence that these indicators are narrow, often misleading, and generally insufficient to capture the full richness of scholarly work. Considering a wider breadth of contributions in assessing the value of academic activities may require a new mental model.

Two dimensions to illustrate "impact"
Broadening the definition of scholarly "impact" against two dimensions—the scale of contributions' influence and new types of audiences—can help institutions recognize and reward a wider variety of academic achievements and outcomes.

Collaborations, mentoring, and demonstrations of eminence that allow scholars to shape the direction of fields demonstrate increasing scales of impact.

Scale of influence

Scaled magnitude resulting in significant reach, scope, or stature

Collaborative and advisory roles through partnerships and shepherding others' work

Direct contributions through deep disciplinary expertise

FOR EXAMPLE
Leadership roles in disciplinary societies or editorial boards
Transformative methodological advances

FOR EXAMPLE
Policy advisory roles
Contributions to institutional policy (e.g. diversity, equity, and inclusion (DEI))

FOR EXAMPLE
Real-world societal (e.g., cultural, patient, community, environmental, or economic) impact

Researcher Katalin Karikó's work on mRNA immunogenicity was repeatedly dismissed by elite journals and funders, yet became key to the development of Covid-19 vaccines.

FOR EXAMPLE
Teaching
Mentoring, advising, and career guidance

FOR EXAMPLE
Team research or interdisciplinary collaborations
Peer review and conference roles

FOR EXAMPLE
Industry collaborations and commercialization

While non-academic works and social media lack the rigor of peer review, communicating the value and importance of scientific advances to wider audiences makes scholarly knowledge more approachable and meaningful.

FOR EXAMPLE
Journal articles and conference publications
Datasets, software, or products

FOR EXAMPLE
Open science/data and open access
Preprints
Asynchronous education

FOR EXAMPLE
Popular press books and publications
Social media or altmetric profile

New audiences
Reaching audiences outside of disciplinary or academic peers can broaden the societal value derived from scholarly work.

Disciplinary or field-specific audiences

Institutions or broader academic settings

Contexts external to academia

Recognizing the impact created by cultivating future generations of scholars also rewards contributions of women and minoritized individuals who tend to bear heavier expectations and loads for mentoring.

Open datasets and open science are increasingly valued for their contributions to replication and research transparency. This broadens access and rewards a mindset of collaboration over competition.

Expanded definitions for "impact" can help individuals identify and embrace different goals.
While some scholars may naturally be more oriented toward disciplinary work, seeing a broader set of "impact" characteristics allows academics to define, plan for, and pursue more personally meaningful career aspirations.

Pursuing a traditional path of deep specialization within a discipline will continue to provide credibility of expertise and a significant base of influence within one's field.

Applied research, perspectives, and project work provide new forms of visibility and societal value through scholarly activities that directly contribute to real-life challenges.

Emphasizing how expertise can enrich other individuals, collaborations, or entire fields rewards scholarly activities that value interdisciplinarity and fostering new capabilities.

The explicit recognition of efforts that support open research or diversity, equity, and inclusion (DEI) can enhance their status as critical components of academic values.

Tool creation process

Synthesized/prioritized issues from DORA community conversations (urgency, interest, TARA "fit")

TARA tools are a work in progress that incorporate needs and feedback from the community

Developed initial drafts of tools

Internal and external review, incorporated feedback

Shared with larger community (today)

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DORA

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Diversify across characteristics to support a range of perspectives
While increasing racial and gender representation is critically important, people from other less-represented groups—like first-generation or early career academics, or those with cross-disciplinary experience—can also invite new and valuable perspectives.

Connect committee composition to outcomes through representation of those who will be affected
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Taking a portfolio view
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This work was sponsored by Arcadia—a charitable fund of Lisbet Rausing and Peter Baldwin.

Debiasing Committee Composition and Deliberative Processes

Motivation and purpose:

Even well-meaning deliberative bodies and decision-making panels tasked with making judgments about promotion, tenure, grants, and hiring can be biased, and tend to reinforce existing power dynamics.

Being more deliberate and thoughtful about how committees are constructed and the rules by which they operate can reduce the likelihood of biased outcomes.

Content overview:

Strategies and principles to create more diverse composition

Common traps to avoid

Suggestions for taking the long view (e.g. providing ECR exposure to downstream processes)

Taking a portfolio view

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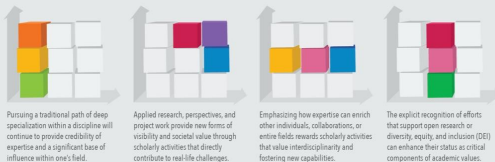**Specific strategies to address particular kinds of bias within deliberative processes**

Building Blocks for Impact

Motivation and purpose:

Traditional measures of scholarly impact like citations and grants tend to represent a very narrow view of impact that downplays or neglects interdisciplinary work, non-traditional measures, and real-world outcomes.
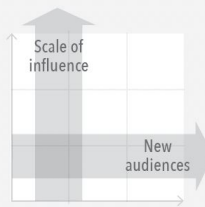
This tool introduces a framework and set of impact characteristics that expand on current conventions, allowing individuals and institutions to represent a wider array and scaled set of of scholarly contributions.

Two dimensions to illustrate "impact"

Broadening the definition of scholarly "impact" against two dimensions—the **scale of contributions' influence** and **new types of audiences**—can help institutions recognize and reward a wider variety of academic achievements and outcomes.

Collaborations, mentoring, and demonstrations of eminence that allow scholars to shape the direction of fields demonstrate increasing scales of impact.

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through partnerships and shepherding others' work

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Content overview:

Two new axes for reframing "impact"

- Scale of influence
- Nature of the audience

General examples of the kinds of activities falling within each cell
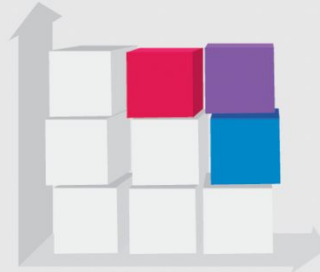
Exemplar and illustrative instances

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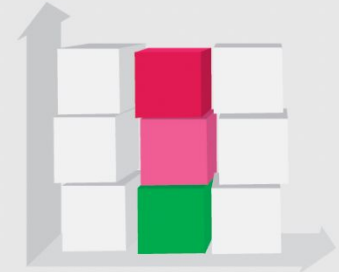
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The explicit recognition of efforts that support open research or diversity, equity, and inclusion (DEI) can enhance their status as critical components of academic values.

Examples of archetypal and/or aspirational personas or clusters of characteristics; full coverage is not necessarily the goal

Not prescriptive; examples of how excellence might take different forms

Potential to represent varying expectations for ECR v. senior scholars

Questions about 2022 tools

- ***Where are these available?*** *On the DORA website under Resources and at Zenodo*

- ***Will there be more opportunities to give feedback or ask questions?*** *Comments/questions and examples or use cases can submitted through the DORA website or emailing info@sfdora.org*

- **What can we clarify about the tools' intent and design?**

- **How can DORA best support their use in your work or institution?**

Proposed tools and extensions for 2023

Expanding on 'impact'

- Gathering cases and examples of impact "in action"

- Practical strategies for adoption

- Visual frameworks for specific content (a la CRediT)

End-to-end careers

- Recognizing needs of different career stages

- 'Hidden curriculum' insights

- Transitions in or out of academia (i.e. skill translation)

Structured discussion on the 2023 proposed tools

- What specific aspects of these topics would you find most important or useful for us to focus on to address research assessment challenges?

- Who would be the best audiences for these proposed tools?

  – Example: Faculty, Hiring committees, etc.

- How might you use the proposed tools in your own context?

  – Example: Advocacy, guidance to create new policies or practices, etc.

Upcoming work

- Dashboard user testing
  - Sign up for emails at https://sfdora.org/ (bottom right of the page) for future updates
- Share your story!
  - Email info@sfdora.org to let us know how you use these tools and to share outputs from their use!
  - #DORAInAction #ProjectTARA
  - Follow & tag us @DORAssessment
- Blog summary and recording to be posted

Stay up to date and in touch!

- Project TARA webpage: sfdora.org/project-tara/
- Debiasing Committees tool: https://sfdora.org/resource/rethinking-research-assessment-debiasing-committee-composition-and-deliberative-processes/
- Impact tool: https://sfdora.org/resource/rethinking-research-assessment-building-blocks-for-impact/