

Working Group on Reforming Academic Career Assessment

Case study “The San Francisco Declaration on Research Assessment (DORA)”

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Country	Country/Region/International International
Name	Official name of the initiative The San Francisco Declaration on Research Assessment (DORA)
Institution	Name of the institution(s) responsible for the initiative The declaration was created by a group of publishers and academics who convened for the first time at the 2012 Annual Meeting of the American Society for Cell Biology (ASCB) and European Molecular Biology Organization (EMBO). DORA was published in 2013. The American Society for Cell Biology (ASCB) has served as DORA’s administrative entity since 2018.
Stakeholders	Names of other organisations/communities involved DORA works with all members of the scholarly ecosystem to support its organizational goals. The communities that DORA has worked closely with include: public and private research funding organizations, researchers, academic institutions (e.g., librarians, research enabling staff, policymakers), and university associations. There are thousands of organizations that have signed DORA and committed to the recommendations in the declaration. The full list can be found in DORA’s signer database: https://sfdora.org/signers/?signer_type=organisation
Year	When the initiative was launched 2013
Documentation	Link to the main document describing the initiative https://sfdora.org/read/
Website	Link to the website of the initiative (if available) https://sfdora.org/

Summary	Brief description of the initiative <p>The Declaration on Research Assessment (DORA) is a global non-profit initiative to encourage best practices in the professional evaluation of researchers and the outputs of scholarly research. DORA works with members of the global scholarly community to convene on key issues and develop recommendations for concrete interventions. One of the biggest hurdles of policy change is finding practical, real-world examples or studies supporting change. To meet this pressing need, DORA fosters knowledge sharing among policymakers by managing communities of practice and has created infrastructure for sharing and finding documentation on responsible research assessment.</p> <p>The declaration was published in 2013 and includes 18 recommendations for improving research assessment practices for a range of actors. The declaration is perhaps best known for its general recommendation to not use journal-based metrics as a surrogate measure of research quality or to assess individual researchers' contributions for hiring, promotion, or funding decisions. The declaration can be signed by individuals or organizations who wish to commit to reforming their assessment practices.</p> <p>From 2013 to 2018, a group of dedicated volunteers collected individual and organizational signatures to demonstrate the academic community's appetite and support for DORA. In 2018, DORA received funding to create a website and hire its first full time staff member. This enabled DORA to grow into a global initiative for change.</p>
Target audience	Description of the main target audience of the initiative <p>Research assessment culture and norms are influenced by the entire scholarly community. Because of this, DORA's target audience includes all actors within the community to facilitate a systems approach to change. This includes:</p> <ul style="list-style-type: none"> • Research funding agencies • Academic institutions (e.g., librarians, research enabling staff, policymakers) • Publishers • Organizations that supply metrics • Individual researchers (e.g., early career researchers, mid- and late-career researchers)
Geographical Scope	Description of the primary geographical scope of application <p>Global</p>
International potential:	Description of the international potential for adaptation <p>DORA's recommendations have been integrated by organizations around</p>

	<p>the world.</p> <p>As an initiative, DORA has taken the following steps to support international representation and relevance in its activities:</p> <ul style="list-style-type: none"> • DORA's resources (e.g., case studies, resource library, Reformscape) include material from around the world. • DORA routinely hosts free, openly available virtual events on key issues in the research assessment space. • In 2020 DORA launched two communities of practice for research funders to support global coverage, one group for those in the Africa, Americas, Europe time zones and one group for those in the Asia-Pacific time zones. • In 2021, DORA piloted the Community Engagement Grants program, which awarded funding to ten project teams located in nine different countries to advance research assessment at their academic institutions. • In 2022, DORA changed its governance structure to redistribute power outside of Europe and North America and ensure a diversity of voices and experiences steer the strategic priorities of the organization. DORA's Steering Committee includes members from over 15 countries across North and South America, Africa, Europe, and the Asia-Pacific. • Finally, as part of its recent 10th Anniversary Celebration in 2023, DORA hosted a decentralized program of twenty-two events organized by community members in fifteen countries.
Goal	<p>Description of the intended change</p> <p>DORA was created out of a desire to improve the way researchers are assessed for hiring, promotion, tenure, and funding decisions. This level of reform requires the entire scholarly ecosystem to shift its ideas on what work is valuable in the scholarly world.</p> <p>The recommendations of DORA are to stop using journal level metrics as a measure of research quality, to assess research on its own merits, and to recognize a broader range of scholarly work. DORA's goals are for community members to implement and iterate on these recommendations in their assessment policies and practices. Individuals who are responsible for implementation should have access to resources to help them carry out their work and ensure they feel supported in their efforts.</p>
Relevance	<p>Description of the key elements that are relevant for reforming career assessment</p> <p>The declaration was drafted to provide recommendations to key actors in the scholarly community that influence research assessment practices and norms. These actors include research funding agencies, academic</p>

	<p>institutions, publishers, organizations that supply metrics, and individual researchers.</p> <p>There are several key themes that run through DORA's recommendations:</p> <ul style="list-style-type: none"> • the need to eliminate the use of journal-based metrics, such as Journal Impact Factors, in funding, appointment, and promotion considerations; • the need to assess research on its own merits rather than on the basis of the journal in which the research is published; and • the need to capitalize on the opportunities provided by online publication (such as relaxing unnecessary limits on the number of words, figures, and references in articles, and exploring new indicators of significance and impact). <p>The declaration includes 18 recommendations in total, all of which center on how different scholarly actors (outlined above) can implement more responsible research assessment practices. DORA's first recommendations is a general one:</p> <p>"1. 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."</p> <p>The full list of recommendations can be found at: https://sfdora.org/read/</p>
Qualitative	<p>Description of recommendations regarding qualitative assessment</p> <p>The declaration recommends the incorporation of a wide range of scholarly outputs and qualitative information in career assessments. This includes, but is not limited to, qualitative indicators of research impact like influence on policy and practice.</p> <p>"For funding agencies</p> <p>2. Be explicit about the criteria used in evaluating the scientific productivity of grant applicants and clearly highlight, 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.</p>

	<p>3. 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.</p> <p>For institutions</p> <p>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.</p> <p>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.</p> <p>For researchers</p> <p>15. When involved in committees making decisions about funding, hiring, tenure, or promotion, make assessments based on scientific content rather than publication metrics.</p> <p>17. Use a range of article metrics and indicators on personal/supporting statements, as evidence of the impact of individual published articles and other research outputs.</p> <p>18. Challenge research assessment practices that rely inappropriately on Journal Impact Factors and promote and teach best practice that focuses on the value and influence of specific research outputs.”</p>
Quantitative	<p>Description of recommendations regarding quantitative assessment</p> <p>The declaration clearly discourages the use of 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. This recommendation is not limited to the JIF and applies in general to aggregate metrics and metrics that are opaquely calculated.</p> <p>“General Recommendation</p> <p>1. Do not use journal-based metrics, such as Journal Impact Factors, as a</p>

	<p>surrogate measure of the quality of individual research articles, to assess an individual scientist's contributions, or in hiring, promotion, or funding decisions.</p> <p>For organizations that supply metrics</p> <p>11. Be open and transparent by providing data and methods used to calculate all metrics.</p> <p>12. Provide the data under a license that allows unrestricted reuse, and provide computational access to data, where possible.</p> <p>13. Be clear that inappropriate manipulation of metrics will not be tolerated; be explicit about what constitutes inappropriate manipulation and what measures will be taken to combat this.</p> <p>14. Account for the variation in article types (e.g., reviews versus research articles), and in different subject areas when metrics are used, aggregated, or compared.</p> <p>For researchers</p> <p>15. When involved in committees making decisions about funding, hiring, tenure, or promotion, make assessments based on scientific content rather than publication metrics.</p> <p>16. Wherever appropriate, cite primary literature in which observations are first reported rather than reviews in order to give credit where credit is due.</p> <p>17. Use a range of article metrics and indicators on personal/supporting statements, as evidence of the impact of individual published articles and other research outputs."</p>
Diversity	<p>Description of how initiative recognizes and supports consideration of diversity contributions, outputs and impacts</p> <p>DORA's recommendations take into account the diversity of a researchers' outputs. These recommendations are:</p> <p>"For funding agencies</p> <p>3. For the purposes of research assessment, consider the value and impact</p>

	<p>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.</p> <p>For institutions</p> <p>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.</p> <p>For researchers</p> <p>17. Use a range of article metrics and indicators on personal/supporting statements, as evidence of the impact of individual published articles and other research outputs.”</p> <p>DORA has also generated materials that directly address mechanisms to better support a diversity of contributions, outputs, and impacts. These include the Debiasing Committee Composition and Deliberative Processes and Unintended Cognitive and Systems Biases tools, as well as a statement on the intersections between DORA, open scholarship, and equity.</p>
Intersectoral	<p>Description of how initiative recognizes and supports consideration of intersectorality</p> <p>DORA’s recommendations broadly include intersectionality in recommendations 3 and 5, which advocate for the recognition of qualitative indicators of impact on policy and practice:</p> <p>“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.”</p>
Career-stage	<p>Description of how initiative recognizes and supports consideration of career-stage</p> <p>DORA’s recommendations for researchers (the general recommendation and recommendations 14-18) do not specify career stage and may be used</p>

	for researchers at all career stages.
Career-path	<p>Description of how initiative recognizes and supports consideration of career-paths</p> <p>The declaration does not define career-paths. Instead, it emphasizes the importance of recognizing diversity of scholarly contributions and activities that are impactful and therefore is supportive of a diversity of career-paths.</p>
Toolbox	<p>Description of related practical guides and toolkits</p> <p>DORA has created a wide range of resources and tools to support responsible research assessment implementation. These include:</p> <ul style="list-style-type: none"> • Reformscape. Reformscape is an online interactive database of openly available responsible research assessment policies, practices, and processes at academic institutions. This database is designed to grow via community submissions and includes a suite of supporting materials to help users navigate the database, including an introductory brief and video, a how-to guide, and an FAQ. • The case study repository, created in collaboration with SPARC Europe and the European University Association, is a collection of detailed case studies of responsible research assessment reform across a wide range of types of organizations. Each case study outlines qualitative information that might otherwise be lost when looking at a policy alone: the original motivation for reform, the actors involved in catalyzing and implementing new policies and practices, timeline for change, the challenges that were encountered, and how those challenges were overcome. • Five things to consider to optimize, evaluate and iterate on the use of narrative CVs. This quick reference tip sheet outlines ideas for research funders to optimize, evaluate and iterate on the use of narrative CVs for funding decisions. • Building Blocks for Impact. Building Blocks for Impact is a one-pager that outlines and illustrates the wide variety of academic achievements and outcomes that could be considered “impactful”. This model visualizes “impact” on two dimensions: scale of contributions’ influence and new types of audiences. The example achievements and outcomes that are mapped along these dimensions outline a range of scholarly work, including open science practices, institutional policy contributions (e.g., diversity, equity, and inclusion), real-world societal contributions, and industry collaborations. This resource was developed as a result of DORA’s partnership with Ruth Schmidt (Illinois Institute of Technology) for the TARA project. • Debiasing Committee Composition and Deliberative Processes. Debiasing Committee Composition and Deliberative Processes is a one-page brief that identifies strategies for including more

	<p>perspectives and reducing biases in the evaluation processes for hiring, promotion, tenure, and funding decisions. This tool includes ideas for building trust through transparency, taking a portfolio view to decision-making, fostering a diversity of opinion that invites all viewpoints, and expanding possibilities beyond historical norms. This tool would be of particular interest for those who organize or participate in panels for hiring, promotion, tenure, or funding decisions. This resource was developed as a result of DORA's partnership with Ruth Schmidt (Illinois Institute of Technology).</p> <ul style="list-style-type: none"> • Ideas for Action. Ideas for Action outlines five common myths about research evaluation to help universities better understand barriers to change and provides analogous examples to illustrate how these myths exist inside and outside of academia. It also offers five design principles to help institutions experiment with and develop better research assessment practices. This resource was developed as a result of DORA's partnership with Ruth Schmidt (Illinois Institute of Technology). • Unintended Cognitive and Systems Biases. Unintended Cognitive and Systems Biases identifies seven personal biases that can influence hiring, promotion, and tenure decisions. It also reveals four institutional and infrastructural implications of these biases and provides strategies to develop new institutional conditions that reduce bias. Additional context for the brief is provided in a four-part blog post series. This resource was developed as a result of DORA's partnership with Ruth Schmidt (Illinois Institute of Technology). • SPACE to evolve academic assessment: A rubric for analyzing institutional conditions and progress indicators. Organizations can use the SPACE rubric to support the implementation of fair and responsible academic career assessment practices in two ways: First, it can help establish a baseline for the current state of infrastructural conditions, to gauge an institution's ability to support the development and implementation of new academic assessment practices and activities. Second, the rubric can be used to retroactively analyze how strengths or gaps in these institutional conditions may have impacted the outcomes of concrete interventions targeted to specific types of academic assessment activities—such as hiring, promotion, tenure, or even graduate student evaluation—either helping or hindering progress toward those goals. This resource was developed as a result of DORA's partnership with Ruth Schmidt (Illinois Institute of Technology). <ul style="list-style-type: none"> ◦ SPACE rubric workbook and workshop kit. This kit is intended to equip organizers with the materials needed to run a version of the DORA SPACE workshop for participants from their academic association, institution, department, and more. It contains a slide deck, pre-workshop materials, and instructions for breakout room facilitators. This
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	<p>resource was developed as a result of DORA's partnership with Ruth Schmidt (Illinois Institute of Technology).</p> <ul style="list-style-type: none"> • Balanced, broad, responsible: A practical guide for research evaluators. Balanced, broad, responsible: A practical guide for research evaluators is a short, informative video that is accompanied by a one-page brief. The video and document are meant to serve as resources for public and private funders of research seeking to promote a more holistic approach to the evaluation of funding proposals. These resources are a result of DORA's partnership with the Luxembourg National Research Fund (FNR).
Implementation	<p>Description of implementation process</p> <p>The implementation of DORA's recommendations and DORA's broader mission as an organization are outlined in its 2023-2026 Strategic Plan. Implementation is the responsibility of DORA's staff and leadership (Steering Committee, Executive Board, co-Chairs, and Vice Chair). Broadly, DORA's strategic objectives are to:</p> <ul style="list-style-type: none"> • Increase awareness of the negative impacts of research assessment practices that are too dependent on inappropriate metrics, and of the positive impacts of alternative practices • Accelerate the development of clear and concrete measures to reform research assessment • Support advocates of research assessment reform worldwide • Secure the funding needed to deliver DORA's mission as efficiently and as rapidly as possible. <p>By becoming signatories, organizations commit to implementing DORA's recommendations. DORA recognizes that this takes time and considerable effort, and in 2022 released a policy on engagement and outreach for signatory organizations to clarify expectations and codify DORA's approach. "In essence, the policy asks signatory organizations first to make a public statement explaining their commitment to DORA; second, a measure aimed principally at research-performing organizations, it aims to ensure that their implementation of the DORA principles is informed by ongoing dialogue with staff and students who are involved in research and research-enabling activities. The policy also states explicitly the action that DORA will take should credible reports be received of a signatory organization not living up to these expectations. As always, the guiding philosophy in our approach is to support a community of learning that is committed in good faith to reform of research assessment. The policy applies to all new signatories as of November 7, 2022, but we would strongly encourage all existing signatory organizations to take similar measures to demonstrate their commitment to DORA."</p>

Uptake	<p>Description of implementation uptake</p> <p>As of March 2024, DORA has been signed by over 21,000 individuals and over 3,100 organizations around the world. Since the 2020 release of the resource library and case study repository and the 2024 release of Reformscape, DORA has worked to collect and share evidence of implementation. DORA has also worked to encourage community members and signatory organizations to share their reform efforts with their community by submitting openly available policies and practices to the resource library, for consideration as a case study, or to Reformscape.</p> <p>To date, there are hundreds of resources in the library, hundreds of policies and practices in Reformscape, and fifteen detailed case studies of change. Of note, not every resource that DORA collects is from a signatory organization. This is because DORA deeply values the change efforts of organizations from within and without its signatories, and recognizes that organizations may not be in a position to sign or may have made changes as part of a different initiative.</p> <p>DORA is not an accrediting organization. In November 2022, DORA released a policy on engagement and outreach with signatory organizations that clarified the expectations that DORA has for signatory organizations. The policy “clarifies how we expect signatory organizations to implement the commitments entailed in signing the Declaration on Research Assessment. In essence, the policy asks signatory organizations first to make a public statement explaining their commitment to DORA; second, a measure aimed principally at research-performing organizations, it aims to ensure that their implementation of the DORA principles is informed by ongoing dialogue with staff and students who are involved in research and research-enabling activities. The policy also states explicitly the action that DORA will take should credible reports be received of a signatory organization not living up to these expectations. As always, the guiding philosophy in our approach is to support a community of learning that is committed in good faith to reform research assessment.”</p>
Challenges	<p>Description of identified implementation challenges/obstacles.</p> <p>As with any change that works across a large, complex system, one challenge is supporting individual responsible research assessment champions as they work to implement reform at their respective organizations. DORA recognizes this and has codified steps to address it in its 2023-2026 Strategic Plan by prioritizing the creation of more practical resources for community champions.</p> <p>An additional challenge that is unique to a global or international</p>

	organization like DORA is connecting with the appropriate individuals who are in positions to advocate for and make change.
Benefits	<p>Description of identified implementation benefits.</p> <p>The implementation of DORA's recommendations are context dependent based on the geographic region, organization type, and community.</p> <p>DORA's case study repository is one of the most direct examples of implementation benefits that the organization has. The repository contains stories of change in progress, but also stories of change after it has concluded and the benefits of implementation. These benefits include more qualitative assessment criteria, greater transparency in assessment processes, promotions of faculty that might not otherwise have been promoted as a result of new career tracks, and increased valuation of socially engaged research.</p> <p>Having said this, many of DORA's community members are still in the process of implementing new changes to their policies and collecting valuable data on the results of these new policies.</p>