

Working Group on Reforming Academic Career Assessment

Case study “Open and Responsible Researcher Reward and Recognition (OR4)”

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Country	Country/Region/International United Kingdom
Name	Official name of the initiative Open and Responsible Researcher Reward and Recognition (OR4)
Institution	Name of the institution(s) responsible for the initiative UK Reproducibility Network, University of Bath, University of Cardiff, University of Greenwich, University of Keele, University of Newcastle, University of Reading, University of Surrey
Stakeholders	Names of other organisations/communities involved Anglia Ruskin University, Bath Spa University, Birkbeck University, Brunel University, Cardiff University, CRUK Scotland Institute, Durham University, Goldsmiths University, King’s College London, Lancaster University, Leeds Beckett University, Liverpool Hope University, Liverpool John Moores University, Loughborough University, Manchester Metropolitan University, Newcastle University, Nottingham Trent University, Queen Mary University of London, Queen’s University Belfast, Royal College of Music, Sheffield Hallam University, Staffordshire University, Swansea University, Teesside University, The School of Advanced Study (University of London), Ulster University, University of Aberdeen, University of Birmingham, University of Bristol, University of Cambridge, University of Central Lancashire, University of Derby, University of Dundee, University of East Anglia, University of Edinburgh, University of Glasgow, University of Greenwich, University of Leeds, University of Leicester, University of Liverpool, University of Plymouth, University of Portsmouth, University of Reading, University of Salford, University of Suffolk, University of Sunderland, University of the West of Scotland, University of Warwick, University of York, York St John,

	University
Year	When the initiative was launched 2021
Documentation	Link to the main document describing the initiative https://osf.io/79yu5
Website	Link to the website of the initiative (if available) https://www.ukrn.org/open-and-responsible-researcher-reward-and-recognition-or4/
Summary	<p>Brief description of the initiative</p> <p>The Open and Responsible Researcher Reward and Recognition Project (OR4) is one of five projects that together make up the UK's Open Research Programme. The Open Research Programme is a six-year national initiative (from 2021-2027) to accelerate the uptake of open research practices, supported by Research England and led by the UK Reproducibility Network (UKRN). The aim of OR4 is to support the implementation in UK higher education and research-performing institutions of responsible research assessment policies and practices that recognise and reward open research. Its focus is on the assessment of researchers for purposes of recognition and reward, for example, as part of recruitment, promotion, and performance review.</p> <p>The project will achieve its objectives primarily through the development and promotion of an implementation toolkit for institutions and by supporting a national community of practice.</p> <p>The Recognising and rewarding open research toolkit consists of a maturity framework and self-assessment tool and an integrated implementation guide. These resources can be used to support institutional maturity assessment, planning and progress. The implementation guide provides in-depth practical guidance and will include case studies from institutions participating in the community of practice. The toolkit was piloted and developed with the input of the community of practice and release in a first version in October 2024. It will be updated over the course of the project, notably to further develop practical guidance based on maturing knowledge and experience shared through the OR4 community of practice, and to add case studies provided by members of the community of practice.</p> <p>The community of practice, which currently numbers 50 UK institutions,</p>

	<p>has been meeting since Autumn 2022. It promotes the exchange of knowledge and practice, and has enabled members to benefit from early access to project resources during their development period.</p> <p>In addition to working with this community of practice, the project seeks to further develop engagement with its activities and outputs, both nationally and internationally, through a number of channels, including the UK National Chapter of CoARA, national stakeholders such as UK Research and Innovation, and stakeholders represented in its Advisory Group (including DORA, CoARA and UNESCO among others). It will maintain awareness of and where relevant seek to connect with other initiatives related to recognition and reward for open research, such as the OPUS project to develop an Open Science Researcher Assessment Framework.</p> <p>In order to support delivery of its objectives, the project also includes two key knowledge-building activities:</p> <ul style="list-style-type: none"> • It has carried out a landscape review providing an overview of relevant literature, initiatives and resources. This has been used to develop an online knowledgebase of useful resources aimed at institutions. • In 2023 the project undertook a survey of UK institutions' policies, practices, strategic activity and requirements in relation to responsible research assessment and recognition and reward for open research. This survey will be repeated in 2026, allowing the project to develop a picture of national progress.
Target audience	<p>Description of the main target audience of the initiative</p> <p>The main target audience is:</p> <ul style="list-style-type: none"> • UK higher education institutions and research-performing organisations, and in particular research leaders and managers within those organisations who are responsible for leading and implementing strategic activities related to research assessment reform and open research. • Key stakeholders in UK research, including UK Research and Innovation and the UK's other higher education funding bodies, and the Careers Research and Advisory Centre (CRAC) through its Vitae programme supporting the professional development

	<p>of researchers. We will endeavour to communicate and engage with groups having specific interests and influence in relevant areas, such as the UK National Chapter of CoARA, the REF Steering Group (responsible for implementing the national research assessment exercise) and the INORMS Research Evaluation Group.</p>
Geographical Scope	<p>Description of the primary geographical scope of application</p> <p>United Kingdom</p>
International potential:	<p>Description of the international potential for adaptation</p> <p>While the main project beneficiaries are UK institutions, the project is aligned to the international framework for responsible research assessment represented by CoARA, and maintains awareness of and seeks to engage with initiatives addressing recognition and reward for open research, including relevant CoARA Working Groups and the EU-funded OPUS and GraspOS projects. The project's international Advisory Board consists of representatives of key initiatives such as CoARA, DORA, the Leiden Principles, and the UNESCO Recommendation on Open Science. The toolkit contains some details that are specific to the UK situation, but it is adaptable to other national contexts, and the project will seek opportunities to share practice through relevant networks.</p>
Goal	<p>Description of the intended change</p> <p>The project aims to support UK institutions to implement effective recognition and reward for open research in their research assessment policies and processes, in order to drive the uptake of open research practices. It also aims to contribute to national discussions about the role of open research in research assessment and to inform the development of national policy.</p>
Relevance	<p>Description of the key elements that are relevant for reforming career assessment</p> <p>The Agreement on Reforming Research Assessment recognises that '[o]penness of research, and results that are verifiable and reproducible where applicable, strongly contribute to quality'. It asks signatories to '[c]onsider [...] the full range of research outputs, such as scientific publications, data, software, models, methods, theories, algorithms, protocols, workflows, exhibitions, strategies, policy contributions, etc., and reward research behaviour underpinning open science practices such as early knowledge and data sharing as well as open collaboration within science and collaboration with societal actors where appropriate'. The UNESCO Recommendation on Open</p>

	<p>Science (2021) is explicit on the importance of research assessment: 'Assessment of scientific contribution and career progression rewarding good open science practices is needed for operationalization of open science'.</p> <p>Institutions, and the sector as a whole, still have a long way to go to operationalise this element of research assessment in academic career progression. In 2018 the European Universities Association EUA Roadmap on Research Assessment in the Transition to Open Science argued: 'Today, research assessment and reward systems generally do not reflect important Open Science contributions, such as curating and sharing datasets and collections, documenting and sharing software (source code), or devoting time and energy to high-quality peer review. New approaches to research assessment that take into account Open Science contributions need to be identified and thoroughly discussed by academic communities'. We do not believe the situation has significantly changed in the time since 2018.</p> <p>The OR4 2023 survey of a sample of UK institutions provided strong evidence that in the vast majority of institutions open research is not recognised or rewarded, for example in recruitment and promotion activities. Only 8% of institutions included any open research criteria in their academic promotion policies, and the guidance and support that would enable those submitting evidence for assessment and those undertaking assessment to use these criteria effectively appeared to be lacking in most cases. In consequence, open research practices and outputs are as yet largely unrepresented and not valued in research assessment activities. In many institutions the need to recognise and reward open research has not yet been clearly identified as a strategic priority. Hence there is a role for OR4 to play in supporting UK institutions to identify the need for and develop strategic action in this area.</p>
Qualitative	<p>Description of recommendations regarding qualitative assessment</p> <p>There is a need for norms and standards for the qualitative assessment of open research outputs to become established, and for those involved in assessment to be enabled to develop the knowledge and skills to apply them in specific contexts. The OR4 project will help institutions to develop policies, guidance and support that enable effective qualitative assessment and that include consideration of open research. It will use the implementation toolkit, knowledgebase and community of practice to highlight and share activity in the sector to evolve these norms and standards. For example, the OPUS project is</p>

	<p>developing a researcher assessment framework toolbox that can be adopted and adapted by institutions, including a number of open science indicators, both qualitative and quantitative. This project is discussed in the Recognising and rewarding open research toolkit and the OR4 landscape review.</p> <p>The OR4 project will support institutional efforts to broaden the scope of research assessment beyond the current strong focus on publications and related metrics, to encompass a wider range of outputs and activities and a more qualitative approach. We believe, for example, that adoption of narrative CV formats for institutional processes could support these objectives.</p>
Quantitative	<p>Description of recommendations regarding quantitative assessment</p> <p>The project's 2023 survey of UK institutions indicates that a focus on research publications and related quantitative metrics in relation to career progression and institutional performance in league table rankings can impede broader qualitative consideration of the full range of activities and outputs by which a researcher may generate value. We believe it is important to challenge the dominance of publication metrics in institutions, and their tendency to occlude other activities and outputs in research assessment.</p> <p>There is also a need to develop reliable, quality-assured and suitably qualified indicators and metrics for open research, and the systems and processes to collect and manage them, to support the greater visibility of open research outputs within institutional research information systems and responsible assessment procedures.</p> <p>The project will use the implementation toolkit, knowledgebase and community of practice to highlight and share activity in the sector to develop quantitative indicators and metrics for open research, and the systems to collect and manage them. The Open Research Programme includes a workstream on open research indicators, which is referred to in the Recognising and rewarding open research toolkit.</p>
Diversity	<p>Description of how initiative recognizes and supports consideration of diversity contributions, outputs and impacts</p> <p>The OR4 project aims to support institutions to recognise and reward a greater diversity of activities and outputs, and the roles that contribute</p>

	to them, such as those related to data curation, software engineering, and science communication, as well as the participation of other societal actors in research. We believe that research assessment should give greater weight to research outputs other than publications that contribute to the transparency, reproducibility and value of research, such as datasets, software, digital resources, and peer reviews, and should recognise the use of methods that promote participation in and engagement with research by other societal actors.
Intersectoral	<p>Description of how initiative recognizes and supports consideration of intersectorality</p> <p>Open research outputs may be the products of actors in the research who are customarily under-represented in research publications, such as data curators, software engineers, and technicians, who in some cases may have substantial professional expertise and track records acquired outside the higher education sector. We hope this project will contribute in part to efforts in the sector to afford these roles greater professional recognition. The toolkit highlights the UK's Hidden REF initiative to promote better recognition of the often-unacknowledged roles and contributions in research. While we support greater recognition for open research within research assessment processes, we also emphasise the need for research assessment not to disadvantage those who by reason of professional and cultural background may not have had the opportunity to use open research practices.</p>
Career-stage	<p>Description of how initiative recognizes and supports consideration of career-stage</p> <p>We support the inclusion of open research criteria in research assessment in fair and equitable ways that take into account factors specific to the individual. We recognise that the opportunity to develop a track record in open research will depend on a number of factors, including the career stage of a researcher. The OR4 project is delivered by and engages with a range of stakeholders at UK institutions representing different academic career stages, from early career researchers to senior academics in positions of research leadership within their institutions. While institutional stakeholders participating in the OR4 community of practice are mainly research leaders and managers, the project is able to benefit from access to the UKRN's Local Networks, which include strong representation from early career researchers. In February 2024 the project consulted with Local Network Leads on their expectations as to how institutions should reward and</p>

	<p>recognise open research activity. This highlighted key issues:</p> <ul style="list-style-type: none"> • The opportunity to use open research practices can depend on how supportive an early career researcher's PI is. Researchers should not be disadvantaged in assessments where they have not been effectively supported to apply open research practices. • It is particularly important that early career researchers receive the training, guidance and mentoring that will enable them to apply open research practices effectively in their research. • Team research is often integral to open research practice, but often this is not well recognised and rewarded. There needs to be better recognition for a wider range of contributions and activities. <p>1.</p> <p>We will take these considerations into account in developing project resources and activities.</p>
Career-path	<p>Description of how initiative recognizes and supports consideration of career-paths</p> <p>We recognise that the opportunity to practice open research may depend on the career path a researcher has taken among other factors, and these factors should always be considered when assessing a researcher's track record. Considerations of career path are addressed in the Recognising and rewarding open research toolkit.</p>
Toolbox	<p>Description of related practical guides and toolkits</p> <p>The Recognising and rewarding open research toolkit consists of a maturity framework and self-assessment tool, which can be used to support institutional maturity assessment, planning and progress, and an integrated implementation guide, which provides in-depth practical guidance across all areas of implementation described in the maturity framework, and will include case studies from participating institutions and resources they have developed to support implementation and practice. The first version of the toolkit was released in October 2024. It will be updated throughout the duration of the OR4 project (until 2027), notably to further develop practical guidance based on maturing knowledge and experience shared through the OR4 community of practice, and to add case studies provided by members of the community of practice.</p> <p>OR4 will also publish a searchable knowledgebase of relevant</p>

	<p>initiatives and resources that institutions can draw on to support activity to implement recognition and reward for open research.</p> <p>The OR4 survey of 60 UK institutions’ policies and practices in relation to responsible research assessment and open research was undertaken in 2023 and the report of the survey findings was published in March 2024. This provides a baseline overview of the current UK landscape, against which national progress will be assessed when the survey is re-run in 2026.</p>
Implementation	<p>Description of implementation process</p> <p>The project runs from 2021 until 2027.</p> <p>The institutional policies and practices survey was undertaken in 2023. The survey report was published in March 2024. It was widely publicised and shared with key national stakeholders.</p> <p>The community of practice was established in November 2023 and will continue to meet throughout the project. It currently numbers 50 institutions, among which 14 institutions are participating as OR4 ‘case study institutions’. The latter will provide case studies of emergent practice to illustrate the implementation guide and will be promoted through the project website.</p> <p>The Recognising and rewarding open research toolkit was developed in 2023-24 in collaboration with community of practice institutions. A number of institutions undertook a self-assessment exercise and reported results and feedback to the project, provided feedback on the guide, and have committed to provide case studies to illustrate the guide. A first iteration of the toolkit was published online in October 2024. It will be further developed and updated, for example, by the addition of case study material, over the course of the project.</p> <p>The knowledgebase is due to be published later in 2024.</p>
Uptake	<p>Description of implementation uptake</p> <p>There are currently 50 UK institutions participating in the OR4 community of practice, of which 14 are case study institutions. Institutional representatives participating in the community of practice</p>

	<p>are for the most part senior research leaders and managers.</p> <p>Representatives from 60 UK institutions completed the OR4 survey, including 59 higher education institutions (43% of the 141 members of Universities UK invited to participate) and one research institute. Responses presented a distribution across the full range of institutional sizes and degrees of research intensity. Twenty-three responses were received from institutional members of UKRN. Forty-one responses were received from institutions that are directly engaged with the OR4 project through its community of practice.</p> <p>OR4 participates in the UK National Chapter of CoARA, and will seek to engage those institutions not yet participating in OR4 through this forum. The project is also positioned to engage key stakeholders in the UK, such as UK Research and Innovation (UKRI).</p>
Challenges	<p>Description of identified implementation challenges/obstacles.</p> <p>The OR4 survey identified a number of challenges to implementing effective recognition and reward for open research and realising the goals of the project:</p> <ul style="list-style-type: none"> • Institutions are at early stages of operationalising responsible research assessment. Recognition and reward for open research is currently addressed within very few research assessment policies and processes. In many institutions it is not identified as a priority. In practical terms, this means there is a lack of matured experience that can inform knowledge and practice exchange, for example through the case studies the project proposes to include in its implementation guide. • There is currently a lack of established models and standards for recognising open research within research assessment. How should open research be defined, measured, and assessed? How can principles be consistently applied while accounting for disciplinary differences? Lack of practical guidance and solutions, and evidence of wide adoption, can inhibit institutions from taking action. • There are concerns about the risks of open research-related assessment criteria excluding those who might lack the education, infrastructure, resources or opportunity to use open research practices. Any assessment criteria and practices

	<p>must be carefully designed and applied to ensure they are fair and equitable.</p> <ul style="list-style-type: none"> • There is across the sector an entrenched focus on publications and related metrics that impedes consideration of other activities and outputs. This applies at the level of individuals, who see publications and related metrics as important for career progression, as well as at an institutional level, in respect of the national Research Excellence Framework exercise (outcomes of which determine institutional funding) and league tables, both of which rely heavily on publications. The evolution of a more inclusive assessment culture will require concerted action across the sector at many levels: by governments, funders, institutions, and those in positions of influence within institutions. <p>The challenges identified above constitute a complex of problems that are far beyond the capacity of OR4 to solve, although it may be able to play a role in promoting understanding of these challenges, fostering the will and commitment to work towards finding solutions, and facilitating the communication and adoption of standards and best practice. OR4 will seek to inform efforts to develop frameworks and standards for the recognition of open research activities and outputs within the context of research assessment that are fair and transparent and widely adopted, through the dissemination of its outputs and engagement with key UK research stakeholders.</p>
<p>Benefits</p>	<p>Description of identified implementation benefits.</p> <p>Effective implementation of recognition and reward for open research should incentivise and enable good open research practice on the part of researchers and increase the selection and promotion of researchers who use such practices. It should promote better visibility of research roles and contributions that are often under-represented in systems of recognition and reward, and foster greater diversity in research. This in turn should increase the accessibility, reproducibility and re-usability of research, with benefits for individual researchers, institutions and wider society.</p> <p>The OR4 project aims to help UK institutions realise these benefits through the development of practical resources and support and by enabling the exchange of knowledge and practice. We recognise that all institutions are in the very early stages of this journey. Realisation of the benefits will be long-term beyond the end of the project, and will</p>

	<p>occur within the context of broader changes in research environment and culture. Within the period of the project itself we expect to see evidence of progress in strategic action to address this area of research assessment practice. This progress will be assessed by the project when it re-runs the institutional policies and practices survey in 2026. It should also be evidenced through reports of institutional activity and progress in the community of practice and the provision of case studies to illustrate the implementation guide. Institutions will be enabled to monitor their own progress by using the maturity framework to support self-assessment at different time points.</p>
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