Identifying Metrics for Measuring Research Culture at the University of Leeds

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Abstract

Evaluating research quality, environment, and impact has become standard in Higher Education (HE) and is largely based on quantitative data and expert assessments. Data-driven evaluations that focus on high-level statistics or conventional outputs can compromise the recognition of a wider range of research outputs and outcomes by a more diverse range of contributors. Hence, the mechanisms for evaluating research must be applicable and inclusive of a wide range of research activities. In contrast, research culture covers a vast breadth of areas, from career development, career pathways, reward, and recognition, to research integrity and equality. Most of these areas are not easily measurable, with capacity and capability limitations compounding the challenge. Clearly, there is a wealth of measurement options, which many research institutions are currently grappling with to best suit their local context. However, there are concerns as to whether it is appropriate or even possible to measure research cultural change. Concentrating too heavily on metrics rather than the changes themselves may pose additional barriers to the cultural change we desire. Thus, we argue that the adopted measures must be nuanced for context and for success relative to where we started and what we collectively understand as being measured.

Here we discuss the University of Leeds' process of selecting metrics to measure research culture change over the next five years. We share how we engaged with the SCOPE framework to identify, shortlist, and probe potential metrics across the four strategic objectives we have identified are best placed to enhance our research culture. From an initial list of more than 80 metrics we have been able to narrow down to just five robust metrics that we feel, with regular monitoring, will maintain adaptability, resilience, and rigour.

This paper aims to provide open and transparent insight into how we have chosen to measure our change in research culture, in order to: benefit the wider sector; foster the sharing of best practices and avoid duplication of efforts. Thus, capturing the true essence of what we at the University of Leeds think it means to change culture.

Introduction

Research Culture impacts the entire research environment determining who does research, who enables research and how research is conducted (**Arthur, 2016**). It affects the type of research done, as well as how it is done and how it is disseminated and shared. While high-quality research is prevalent and widely produced across the research community, there have been rising apprehensions about how sustainable the current research culture is in the long run. Concerns around issues such as: research integrity; reward and recognition; career development and pathways; equality, equity, and diversity; and support for collaboration and interdisciplinarity. All of which affect the quality of the research produced.

However, how we measure research quality is most often driven by a complex grid of incentives imposed by governments, funders and institutions that mainly focus on quantity and narrow definitions of 'impact' rather than quality and human costs according to the Wellcome Trust published report on Research Culture (**Wellcome Trust & Shift Learning, 2020**).

Research culture is central to research excellence and affects the who, how, what, and where of research, and how research is disseminated and distributed (**The Royal Society, 2019**). As such, research and research excellence are influenced by the funders and governing systems such as the UK's Research Excellence Framework. Therefore, enhancing research culture has, in recent years, been an aim for research institutions and one that is supported, at least in England, by significant government funding (e.g., Research England's Enhancing Research Culture Fund).

Since its inception in 2014, the Research Excellence Framework (REF) [i] has been the guiding and driving force for Higher Education Institutions (HEIs) to enhance and achieve excellence in research (**Mcneely, 2023**). It has become a reference for governments, funders, and HEIs, highlighting areas of excellence, advising on the quality of research outputs, promoting best practices to better the research environment, bestowing benchmarks for

research quality and impact and informing the selective allocation of funding for research (**Sutton, 2020**).

However, there is growing recognition that current evaluation methodologies, such as the REF undermine other important elements that contribute to the diversity and enhancement of the research environment and fail to encapsulate the comprehensive spectrum of research outcomes. This recognition has encouraged the enhancement of the current research culture and the improvement of the evaluation methodologies to incorporate diverse activities and outputs. Consequently, building upon the changes to REF 2021 further changes have been planned and are being openly consulted on for what will now be REF2029. These changes see the broadening of the definition of research excellence to ensure recognition is given to the people, culture, and environment where research is undertaken and will capture the contributions of a wider range of research and research enabling staff and more diverse range of research outputs. Institutions that are striving to enhance their research culture will also be rewarded in REF 2029, so how we measure these changes is of paramount importance.

The critical need to develop mechanisms that embrace a wider range of research activities and contributors that may not fit the traditional moulds of evaluation metrics helped shift HEIs towards nuanced mechanisms that capture the multifaceted nature of research to ensure a more inclusive research culture (**Khoo, 2023**). We kept these concerns at the forefront of our minds whilst deciding which process to adopt for determining how best to measure the change we want to see at the University of Leeds (UoL).

Background and Context

Community, Culture, and Impact are the core themes of the University of Leeds Strategy, from which the Research Culture Statement was derived in 2021 marking the starting point for the development of an institutional Research Culture Strategy (RCS) and action plan.[ii]

This research culture statement provided a blueprint for driving cultural change within the university community by fostering a collaborative, supportive and safe environment that emphasises diversity and inclusion and describes Research Culture as:

> *… the environment in which research and innovation happens. It includes the ways in which we collaborate, communicate and interact; the behaviours, expectations, attitudes and values that shape how our research is developed, conducted, disseminated, and used; and the mechanisms by which our work is recognised and rewarded.* (**Leeds, 2021**).

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Acknowledging that the university research culture was not perfect was the first step in changing the research culture. We admitted that our research environment is flawed, it lacks diversity, it inherits a hierarchical culture wherein contributions to the research endeavour are not equally acknowledged and a structure that hinders equitable communication of what is going wrong. We also recognised that research spans beyond the traditional research outputs and should be inclusive of everyone involved in delivering research be it the researchers' staff and students; research enablers: technicians and professional services; or collaborators and partners. As such we utilised a consultative process with ALL of the aforementioned research stakeholders to guide the creation of the Research Culture Strategy. We engaged in discussions with colleagues across the University to understand their research culture priorities. As employees, what type of culture do they aspire to experience? What obstacles have they encountered in achieving this? Through focus groups, meetings, extensive surveys, and various conversations with our network of researchers at different levels, a desired future culture emerged and was made clear. The predominant request from staff was for a workplace where:

- They are recognised for our diverse work,
- supporting equity, diversity, and inclusion is the norm,
- research can be done confidently and openly, and
- There is a culture of mutual support.

These characteristics straightforwardly became our four strategic objectives: valuing diverse forms of research activity; embedding EDI principles in research practices; enabling open research practices; and mutually supporting and developing research teams, with the overarching aim of enabling more University of Leeds colleagues to produce leading research inclusively, equitably, openly, and supportively. We have continued to take this consultative collaborative approach for delivery and in establishing how we will measure research culture change. The formation of several strategic groups of stakeholders: e.g., Responsible Metrics group; Open Research group and the Research Culture steering group, has been vital in supporting the formation and delivery of the strategy.

However, it would be naive to believe that with a new strategy, change will just happen, and our research culture will be better. As with any other organisation, a new culture needs to be skilfully crafted, nurtured, experienced, and measured; so that the community can see and feel the benefits of the new research culture strategy (**Butt et al., 2024**). The need to create a thriving research culture is not guaranteed if we do not have the right tools to measure our progress and assess our achievements. The

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process of identifying and developing the best possible measures suitable for our strategy is described in the following section.

Methods

The consultative process utilised for the creation of our Research Culture Strategy guided the process of identifying metrics to measure research culture improvements at the university.

Through a process of consultations and discussions on what motivations and hazards of measuring, we arrived at the crunch of '*Which facts and figures can best evidence that we are enabling more UoL colleagues to produce leading research inclusively, equitably, openly, and supportively?*'

In common with many other institutions, we explored the use of several frameworks and models that can help shape our approach to choosing and assessing the metrics used to measure changes in research culture. Having said this, we were aware that the issue is not in generating ideas for measuring research culture change, as there is a wealth of possibilities, but it is in identifying the best metrics to measure and those best suited to our local context.

Stage 1: Start with what you value

Since the launch of our formal research culture initiatives in 2021, we have engaged in ongoing discussions with colleagues across the University to ascertain what they value. As employees, we have sought to determine the type of culture they aspire to witness and experience, as well as the obstacles they have encountered in achieving this vision.

We chose to follow the SCOPE Framework[iii] (**Figure 1**) as a model for implementing responsible research evaluation principles and designing robust evaluations (**Davies & Fadhel, 2023**). The framework was developed by the International Network of Research Management Societies (INORMS) Research Evaluation Group and has been piloted by many research institutions. Our reasoning for choosing the SCOPE framework was encouraged by the alignment of the SCOPE principles: Evaluate only where necessary; evaluate with the evaluated; and draw on evaluation expertise; with the University of Leeds values (see below) and the four objectives of our Research Culture Strategy (see above).

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*Figure 1: SCOPE framework (CC-BY) **INORMS, 2023: 5**)*

While existing principles focus mainly on either evaluating a specific entity, e.g., researchers in the case of DORA[iv] and Hong Kong Principles, or via a particular mechanism, e.g., research metrics in the case of Leiden Manifesto and Metric Tide. SCOPE seeks to be applicable across the whole research ecosystem, enabling a responsible approach to design robust evaluations that can be used to evaluate any entity via any relevant mechanism.

The framework helps bridge the gap between the principles and their practical implementation by offering a structured and systematic framework for designing, implementing, and assessing evaluations. Furthermore, this framework provided a useful five-stage process for generating, stress-testing, and evaluating candidate metrics, which helped shape our approach to assessment (**Himanen et al., 2023**).

Stage 2: Context considerations

The next stage was to consider the context of our proposed evaluations, we organised and facilitated a face-to-face workshop with members of our Research and Innovation Board comprising of the following university research leaders: the Deputy Vice-Chancellor for Research and Innovation, Deans for Research Quality and Postgraduate Research, Pro-Deans for Research and Innovation, and Heads of relevant services. In small working groups, we examined *what or who* we could or should evaluate and *why*.

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These constructive conversations resulted in a long list of 85 potential things to measure (**see Appendix**) regarding the focus of our evaluation (e.g., grant applicants, research leaders or partners, publishers) along with an analysis of their associated advantages and risks. The involvement of senior leaders was crucial in advocating for each group's interests by highlighting both the benefits and challenges associated with measurement. This also helped identify instances where our motives for evaluation deviated from the values established during Stage 1.

Stage 3: Options for Evaluating

Stages 1 and 2 produced an extensive list of potential measures, totalling 85, distributed across our four strategic objectives. These metrics were then categorised based on their level of analysis (e.g., individual/school/faculty/institution), data type (qualitative/quantitative/mixed), data sources, target audience for measurement and change implementation requirements, and a specified threshold or success indicator. This comprehensive coding process was labour-intensive but crucial in achieving the following objectives:

- Ensuring a balanced mix of levels of analysis, types of data, and agents responsible for driving change

- Identifying or modifying any impractical metric candidates based on specificity, measurability, validity, availability of data, interdependencies among metrics, etc.

- Prioritising key metrics to be further explored

Using the coding system described above the strategy working group were able to meticulously narrow down the longlist of candidate metrics to 16 top contenders, three-five for each strategic objective (asterisked in appendix). These 16 metrics were then subjected to further analysis and scrutiny during Stage 4 of the evaluation process.

Stage 4: Probe deeply

Bridging perception gaps requires courage and honesty within any institution which involves breaking away from the metrics game and creating evaluation processes that are clearly infused with the organization's core values (**Hatch & Curry, 2020**).

Therefore, we decided to conduct this stage as an externally facilitated face-to-face consultative metric workshop. The workshop included members from: our Research Culture Steering Group; Research Culture Strategy Working Group; chairs of research culture governance groups, our external consultant and external colleagues, representing the full range of researchers (at various career stages and disciplines including technical and clinical colleagues) and professional service colleagues from

across the entire institution (e.g., Organisational Development & Professional Learning (OD/PL), Research and Innovation services (RIS), Library).

To ensure this short workshop was as productive and efficient as possible we enlisted the support of an external facilitator from the Centre for Facilitation.[v]

Our main objectives were to review the shorter list of potential metrics for monitoring and assessing progress in research culture, assess the advantages and disadvantages of each metric, reach a consensus on a smaller set of effective and feasible metrics, ideally one per strategic objective, as well as provide input for drafting an implementation plan encompassing short, medium, and long-term monitoring. The metrics needed to be tailored to the research community's needs and the university's values.

Attendees were preassigned to four tables that aligned with each strategic objective. To further refine the ≈20 prioritised candidate metrics, each attendee privately chose their preferred metric within each objective and placed it in the centre of the table, allowing a consensus to emerge visually. Then focusing on the two metrics with the most votes, each group probed the selection by discussing the strengths and weaknesses of each. Free-form concerns and reflections on the selections were added to the central workspace.

We then rotated around the tables to refocus on the bigger picture. One person from each group stayed in situ to present their group's selection and comments. Other members circulated to other tables listening and commenting on other groups' selection criteria and justification for elimination. At this point, we had 1-2 strong metrics per objective to focus on and a rich commentary from multiple perspectives.

Then came deeper probing. Attendees used the following questions to stress-test the options and to surface any that would be unusable:

- Who might this metric discriminate against?

- How might this be gamed? For example, to achieve more frequent communications about nonstandard contributions, units might report on minor, incremental achievements (aka salami-slicing).

- What might the unintended consequences be?

- What is the cost-benefit?

These proved to be powerful questions for thinking through the implications of each metric, and in some cases, how any unintended consequences might be mitigated. We were keenly aware that there is no perfect metric, and that each would be a trade-off between data availability, representativeness, and a range of other concerns that had surfaced in the coding stage that we circled back to in this stage.

Lastly came a plenary session where reflections on discrimination issues, gaming concerns, unintended consequences, and cost-benefits were shared aloud prompting further reflection leading us to conclude the session having settled upon at least one robust metric for each objective.

Results

Having successfully evaluated and shortlisted five potential metrics for monitoring and tracking the research culture's progress, we also examined their strengths and weaknesses (**Davies et al., 2021**). The discussion process allowed for consensus to be reached on a final collection of suitable, attainable, and agreeable metrics. The wording of the final five metrics was further refined by the Research Culture Strategy Working Group in collaboration with their associated governance groups.

The research culture team incorporated these metrics into an implementation plan encompassing short-, medium-, and long-term monitoring as part of our strategy (**Kent et al., 2022**) and see **Table 1** below:

Table 1: Research Culture Metrics within the Implementation Plan

Metric	Measurable	Measurement Frequency
Increase in the diversity of the types of research activities that are communicated and celebrated.	Number of features mentioning research enablers, non-traditional outputs, research culture activities, research impact activities within School, Faculty, Institutional comms.	6-monthly
Increase in the proportion of academic staff (research track only) promotions to Grades 9 (Associate Professors) and 10 (Professor) by colleagues with protected characteristics that have previously been under-represented.	Equality data on academic staff (research track only) promotions to G9 and 10 by disability, ethnicity, gender, religion/belief and sexual orientation, cf. comparable data on academic staff in post (for grades 8* 10). (Grade 8: (Assistant Prof./Lecturer/Senior Lecturer)	Annually
Increase in the number and variety of University of Leeds research outputs deposited in institutional research information systems.	Total number of outputs recorded in Symplectic for the given year.	Annually
As above	Number of each type of output recorded in Symplectic for the given year.	Annually

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Increase in the variety of staff roles named as PI, Co-I and Researcher Co-I on funding applications.	Number of staff by role that have applied for funding as Co-I, PI and Researcher Co-I (via KRISTAL, Je-S and the UKRI Funding Service).	Annually
Increase in the proportion of staff stating they have benefited from researcher development programmes, by career stage.	Number of staff engaging with self-guided resources and recorded presentations provided by Organisational Development and Professional Learning (OD&PL.)	Quarterly
As above	Number of staff attending development sessions provided by OD&PL.	Annually

The selection process and associated discussions demonstrated that there is no perfect metric, and it was important to consider the various factors in making this decision. Each metric involves a trade-off between data availability, representativeness, potential for gaming, and other concerns. However, the agreed metrics were SMART[vi], adhered to SCOPE principles, and could be driven by a range of centralised and local research culture projects. A blog of the metrics workshop is available and has been shared as a case study on the INORMS webpages.[vii]

Limitations

The extensive list of metrics reflected various aspects of research culture, but there are limitations and challenges in measuring each one. Through careful examination, some metrics were excluded or set aside due to several reasons.

Common reasons for exclusion are the metric not being well-established yet e.g., recording all instances of Positive Action initiatives across the University. The metric has, potential negative consequences e.g., measuring only attendance at researcher development programmes may promote attending a greater number but less relevant programmes. The complexities in data sources, and ambiguity regarding its impact on research culture e.g., multiple different platforms for openly sharing data/code. Or the ambiguity regarding the metric impact on research culture, where metrics have been excluded due to constraints with the current systems for recording and our ability to interrogate these sources, we will review as systems are upgraded, e.g., increased reporting of unprofessional behaviour. e.g., increased reporting of unprofessional behaviour.

While these may not be the definitive metrics for our strategic objectives, they serve as a starting point for our exploration and evaluation journey towards understanding and improving our research culture. The fifth step of the SCOPE process is to evaluate our evaluation and so we will monitor whether these metrics are enabling us to see the research culture changes

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we are aiming for and adapt or expand the metrics where necessary and appropriate.

Discussion and Conclusion

By combining top-down approaches in generating a comprehensive list of metrics and bottom-up methods during the workshop, we achieved a holistic approach and gained buy-in from representatives of the majority of the university's research community. This approach in defining research culture metrics was crucial in shaping a new and preferred research culture that encompasses both the behavioural and structural aspects of the research system.

The ultimate goal is to establish a research environment that promotes researchers' growth by creating an atmosphere free from risk and pressure where every member of the community is acknowledged for their contributions. The metric workshop encouraged a spirit of collaboration, enabling participants to offer valuable input and serve as critical supporters of each other's goals both of which were greatly appreciated by those in attendance. This feedback underscores the workshop's effectiveness in promoting a supportive and constructive setting for discussing research culture and in ensuring alignment with UoL values and research culture strategic objectives.

Simply put, we utilised our *research culture statement* to identify the metrics to measure changes in our research culture by taking an inclusive, equitable, open and supportive approach.

We are a few months out since the launch of our strategy (September 2023) and we have already witnessed a positive change in the research environment through the research communities increased enthusiasm for providing feedback and contributing to enhancing the Research Culture. We are running monthly pulse surveys to allow us to gauge changes in perspectives regarding our work and approach to enhancing research culture. This agile method is essential for steadily achieving our strategic objectives by integrating feedback into our action plan and adapting to the evolving needs of the research community (**Reed & Fazey, 2021**) This increase in engagement and enthusiasm alone are indicative of a positive change in research culture (**Casci & Adams, 2020**).

In conclusion, the SCOPE process and the metrics workshop proved to be a successful platform for evaluating and refining potential metrics for monitoring and assessing progress in research culture. The collaborative discussions, involving senior leaders and representatives from various research culture groups, resulted in the identification of a collection of effective, practical, and agreeable metrics.

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Moving forward, we aim to further develop our approach to refine our methodology for evaluating research culture to ensure a comprehensive assessment that incorporates diverse viewpoints and experiences within our academic environment. Our commitment to inclusivity, equity, openness, and support will guide us as we strive to create a robust and meaningful framework for evaluating the research culture at our institution.

Acknowledgements

Shareefa has over 20 years of experience working as a project manager and change management consultant in Public, Private and academic environments in the UK, the Middle East and North Africa. She is passionate about change and women's development and participation in the national economy, she has received several grants from international organisations to manage women's socio-economic development engagement projects.

Gaynor Miller has been Head of the new Researcher and Innovator Development Academy at Sheffield Hallam University since January 2024. Previously she worked as the Research Culture Manager at the University of Leeds and Life Science Researcher Development Manager at the University of Birmingham. She has over 30 years of research experience which includes working as a lecturer at the medical school at the University of Sheffield for 11 years.

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Catherine Davies is the Dean for Research Culture at the University of Leeds. She leads the University in achieving an inclusive, equitable, open, and supportive research culture. In collaboration with a range of internal and external groups, her team develops initiatives to ensure that research operates with integrity, and in a way that allows all members of the research community to thrive. Catherine is also Professor of Language Development. Her projects investigate the interplay of children's home and educational environments. She is currently focusing on the effects of the COVID-19 lockdowns on language and cognitive development and collaborates with a range of government and practitioner stakeholders to apply research findings to policy and practice.

Appendix

*Shortlisted metric probed at the metrics workshop.

SO1: Valuing diverse forms of research activity

1. Increase in the proportion of the University's UKRI-funded research portfolio that generates non-standard outputs during the annual ResearchFish submission period. Non-standard outputs are defined as outputs other than journal articles and monographs.*

2. Increase in the diversity of the types of research activities that are communicated and celebrated.*

3. Increase in the proportion of staff who report actively contributing to initiatives to improve research culture. Contributions include Research Culture project Co-I, committee member, event organiser, adopter of RC initiative.*

4. Internal funding/award schemes that recognise nonstandard outputs.

5. Naming of nonstandard outputs (outputs other journal articles, monographs) in successful grant applications.

6. Range of staff profiles included in grant applications (e.g. involvement of experimental officers, research associates and research professionals).

7. Collaborations with non-HEIs.

8. Use of CRediT.

9. Fully inclusive use of CRediT, i.e. making sure ALL contributions get recognised.

10. Engagement with Technician Commitment.

11. Implementation of initiatives to support research enablers.

12. Recognition of research culture work in promotion materials.

13. Recognition of research culture work in recruitment materials.

14. Uptake of recruitment and promotion panel training for recognition of research culture practices.

15. Use of narrative CVs in internal processes.

16. Uptake of responsible metrics training.

SO2: Embedding EDI principles in research practices

1. Increase in the proportion of academic promotions to Grades 9 and 10 of colleagues with protected characteristics that have previously been under-represented, e.g. women, colleagues with disabilities, and those who have been racially minoritised.*

2. Increase in the proportion of external funding applications submitted (PI and CoI) by colleagues with protected characteristics that have previously been under-represented, e.g. women, colleagues with disabilities, and those who have been racially minoritised. *

3. Increase in the proportion of external funding applications awarded (PI and CoI) to colleagues with protected characteristics that have previously been under-represented, e.g. women, colleagues with disabilities, and those who have been racially minoritised.*

4. Increase in the proportion of internal funding applications submitted (PI and CoI in e.g. IAA, Policy Fund, seed-corn funding) by colleagues with protected characteristics that have previously been under-represented, e.g. women, colleagues with disabilities, and those who have been racially minoritised.*

5. Increase in the proportion of internal funding applications awarded (PI and CoI in e.g. IAA, Policy Fund, seed-corn funding) to colleagues with protected characteristics that have previously been under-represented, e.g. women, colleagues with disabilities, and those who have been racially minoritised.*

6. Number of Positive Action initiatives used in recruitment to research positions.

7. Number of Positive Action initiatives in internal research funding schemes.

8. Number of promotions that are awarded where some EDI activity has been flagged.

9. Number of examples or projects using inclusive research delivery and design.

10. Number of examples of engagement with the decolonising research framework.

11. Number of examples of EDI engagement by senior leaders.

SO3: Enabling open research practices

1. Increase in the proportion of staff that are aware of Open Research (OR) and how it relates to their own discipline.*

2. Increase in the proportion of staff engaging with OR practices.*

3. Increase in the proportion of staff engaging with OR training &/or events.*

4. Provision of OR training (staff, all student type).

5. Uptake of OR training (staff, all student type).

6. Recognition of OR in HR/career processes (recruitment, probation, promotion, AAM).

7. OR commitment explicit in institutional/Faculty strategy/policy.

8. Institutional resourcing model enables OR.

9. Outputs shared with no restrictions on access.

10. Pre-registration of protocols.

11. Increase in the number of pre-prints posted per researcher.

12. Use of the Rights Retention route to open access.

13. Sharing of research tools/hardware/software.

14. Open practice extending beyond funder mandates.

15. Open peer review.

16. Participation in Citizen Science initiatives.

17. Membership of open research communities of practice (CoP) (e.g., KEN/UKRN/OSN, UKCoRR).

18. Impact of membership of OR Communities of Practice.

19. Positive disruption in scholarly communication landscape (engaging with different practices and platforms e.g., Octopus).

20. Re-use of OR outputs (instances of data, code re-use).

21. Support and monitoring of engagement with CRediT.

22. Fully inclusive use of CRediT.

23. Data on current collaboration practice e.g. from SciVal.

24. Increased local and wider collaboration on applications and publications, which may include a measure around cross-disciplinary/diverse collaboration.

25. Recognition of open research in recruitment materials.

26. Engagement with open research practices (e.g. numbers and diversity of colleagues using open resources in the research lifecycle, e.g. platforms, Octopus, co-production).

27. Provision of OR infrastructure.

28. Accessibility - can people read our research, and does it make sense?

29. Proportion of research outputs published open access – in articles, data, software, monographs, and other outputs.

SO4: Mutually supporting and developing research teams

1. Increase in the proportion of staff taking part in researcher development programmes, by career stage.*

2. Increase in the proportion of staff who have held both a PI and Co-I role, compared to those who have only been a PI or Co-I (over a rolling five-year period to avoid fluctuations).*

3. Increase in the range of staff profiles included in grant applications (e.g., involvement of experimental officers, research associates and research professionals).*

4. Numbers of bullying and harassment complaints, referrals, or disclosures.*

5. Increase in the proportion of staff on FTC that have accessed redeployment.*

6. Participation in researcher development programmes, by career stage.

7. Alignment with the Researcher Development Concordat.

8. Uptake of career coaching.

9. Impact of career coaching.

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10. Uptake of mentoring schemes.

11. Impact of mentoring schemes.

12. Mentor vs Mentee ratio.

13. Matched vs unmatched requests.

14. Areas of mentoring requested e.g. careers.

15. Diversity of roles that individuals take on, i.e. pathways from CoI to PI to senior leader.

16. Proportion of bids where PIs are at different career stages – building research leadership capability.

17. Pump priming of research teams – internal resources to help build capabilities.

18. Wellbeing: Audit of provision available and levels of engagement. Some of this is done via OD&PL.

19. Average workload for researchers.

20. Use of workload models / support for flexible working.

21. Workload measures and the balance between teaching, research, and other allocations.

22. Use of codes of conduct.

23. Bullying and harassment data, numbers of complaints, referrals or disclosures.

24. Number of referrals to workplace mediation service.

25. Requests for support from PGRs to LUU.

26. Effectiveness of redeployment / numbers of FTCs.

27. Number of researchers currently on redeployment.

28. Number of researchers on Fixed-term contracts.

29. Average contract length.

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Endnotes

[i] Information about the REF can be found at: https://ref.ac.uk.

[ii] The Research Culture Statement is available online: https://www.leeds.ac.uk/research-and-innovation/doc/research-culture-statement.

[iii] S stands for START with what you value, C for CONTEXT considerations, O for OPTIONS for evaluating, P for PROBE deeply, and E for EVALUATE your evaluation. There is more on it in (**INORMS, 2023**) and at: https://inorms.net/scope-framework-for-research-evaluation/.

[iv] The San Francisco Declaration on Research Assessment. See: https://sfdora.org/.

[v] The Centre for Facilitation website can be found at: https://centreforfacilitation.co.uk.

[vi] An acronym for Specific, Measurable, Assignable, Realistic, and Time-bound.

[vii] Access the metrics workshop at: https://sway.cloud.microsoft/TKBsP05v1E1VOLaN; or as a case study here: https://inorms.net/scope-framework-for-research-evaluation/.