

Our Research Culture **Index**

BUILD RESEARCH . BUILD CULTURE

MEASURING RESEARCH CULTURE AT NEWCASTLE UNIVERSITY

Background

This report outlines how Newcastle University has developed a new University Research Culture Index (RCI) to monitor research culture change across a basket of values-led measures.

Four 'high level' measures that feature within the Index are part of refreshed University Research Strategy Key Performance Indicators.

Collectively, the indicators within the RCI measure the success of the University Research Strategy, Research Culture Action Plan, and PGR Strategic Delivery Plan.



About the **SCOPE** Framework

We have used the SCOPE framework to explore how we might evaluate our progress towards building a more positive research culture. The SCOPE framework is a five-stage process for evaluating research responsibly.

In traditional methods of evaluation, we can be guilty of over-evaluating the wrong thing in the wrong way – without thinking about the consequences. Perhaps we are reaching for the most practical measure that our systems easily provide – but we don't think about the impact that this measure might have on building a healthy and positive research culture.

The SCOPE framework was developed by the International Network of Research Management Societies (INORMS) Research Evaluation Group (REG) as a practical way of implementing responsible research evaluation principles to design robust and values-driven evaluations.

The acronym SCOPE outlines the five stages of the framework:

- START with what you value
- CONTEXT considerations
- OPTIONS for evaluating
- PROBE deeply
- EVALUATE your evaluation

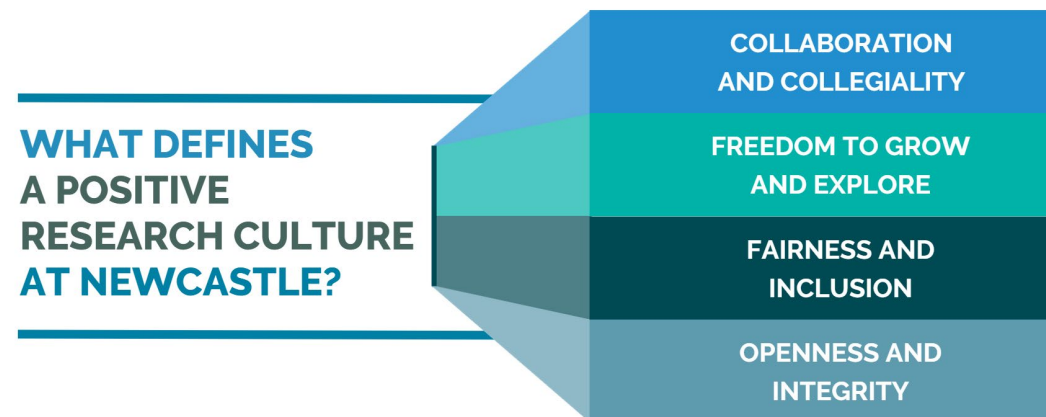
How did we **implement** the **SCOPE Framework**?

We worked in collaboration with Lizzie Gadd and Tanja Strøm from the INORMS REG, valuing their input and expertise to help shape and run the workshops and overall process, and learn more about how SCOPE could be applied to our specific need and context.

Starting with what we value

Using the SCOPE framework, we held an initial community workshop with around 80 colleagues (both academic and professional services colleagues) and postgraduate students to identify what people valued in a positive research culture.

We identified four key attributes of a positive research culture, which we tested and refined at a subsequent smaller workshop of some of the attendees. These were:



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- We invited a smaller group of 20 colleagues to attend a more focused session to take part in this exercise and held facilitated discussion around descriptors for each of the four attributes. This discussion led to deeper and richer understanding. For example, colleagues felt that 'Openness and integrity' might involve 'transparent internal processes and decision-making' and feel 'non-judgmental and safe' – people thought of these attributes not just in terms of how we do research, but how we behave with one another and build research communities.
- By exploring both dimensions of these domains – the behaviours and structures that may result, and the emotional and psychological impacts – we were in a good position to ensure that the resulting Options for evaluating supported both these things.
- These four domains shape our Research Culture Index and frame our wider approach to building a positive Research Culture. More details about them can be found in our [University Research Culture Roadmap](#).



How did we **implement** the **SCOPE Framework**?

Context considerations

Evaluating these four domains is important for helping us track improvements in research culture over time in the things that matter most to members of our research community. The development of KPIs at an institutional level aim to allow us to use a small number of indicative measures that capture and monitor institutional change, and potentially allow us to benchmark our performance relative to other institutions. Measures are only considered in this context, and are not designed to measure individuals, teams or units.

Options for Evaluating and Probing Deeply

We then held a smaller facilitated focus group to generate a series of Options of measures for evaluation, which were then Probed for any unintended consequences. Following this, we consulted with various colleagues with relevant expertise within the University to check for feasibility and viability in the context of different Faculty-based disciplines and in the context of the University's research reporting systems.

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- A finalised RCI is presented in Appendix A. These are a basket of measures that we can use to track institutional improvements in Research Culture.
- Those selected for our RCI were considered feasible, viable and could help drive to research culture in a positive way.
- The utility of the SCOPE process is perhaps best narrated through the measures which we excluded from the original list of options for evaluation.



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Under Collaboration and Collegiality, we excluded measures on:

- **Joint PhD supervision as a measure of collaboration as this is standard practice.** In addition, many academics supervise in teams within the same large units – therefore, projects can be interdisciplinary, but if only using joint supervision across units as a measure of interdisciplinarity, the data would not accurately reflect this.
- **Internal co-authorship of papers.** It was felt this was a lagging indicator and collaboration on grant applications is a better indicator with more immediacy.
- **Newcastle University Centres of Research Excellence (NUCoREs) Cross-Faculty membership.** It was not clear what would this tell us. NUCoREs do not need to have a target membership from different Faculties, and we need to allow for differences and not be too prescriptive in these bottom-up centres of excellence. It was noted that we need a quality measure for NUCoREs.
- **Uptake of Contributor Roles Taxonomy (CRedit).** There was a question mark around the viability of this within our systems at this stage (this could be revisited in the future).

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Under Freedom to Grow and Explore, we excluded measures on:

- **Career pathways.** Whilst career mobility and progression are important measures of personal and professional development, they are difficult to track and data are not readily available for all groups at this stage. However, we might revisit this one for PGRs and Researchers (who have fixed term positions) in the short term as there are datasets that we could explore. For other groups, for example, Professional Services colleagues, any measure would need further consideration and development, as new progression opportunities may need to be provided.
- **Grow PGR Student body by cohorts around our areas of collective research excellence.** It was felt this was too narrow. We will revisit this one in terms of building a thriving research culture for PGRs and link to the PGR Delivery Plan (22/23).

Under Fairness and Inclusion, we excluded measures on:

- **Bullying and harassment reporting.** People weren't sure what this would measure, and whether reporting tells the full story, as opposed to lived experiences. It could also reflect reporting rather than occurrence, and it was unclear whether the measure should increase or decrease. For example, an increase in reporting could be interpreted as a positive if people feel more safe and supported to report, but also a negative if it captures increasing incidence.

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Under Openness and Integrity, we excluded measures on:

- **Ethical approval.** It was felt we didn't need a measure for ethical approval, which is standard process for research.
- **Case studies on good research practice.** At this stage, it wasn't clear how this one would work and be readily collected and would require greater thought. However, it could tie into measuring performance of our Academies.
- **Reduction in cases of misconduct.** This figure is low given the number of colleagues we have, and questions were asked about whether this would be a meaningful measure.
- **Completed Data Management Plans (DMP).** Although DMPs are a requirement or encouraged for all grant applications and with our PGRs, they aren't recorded or reviewed. It would not provide a meaningful measure at this point in time.
- **data.ncl.** Data sharing is widely promoted as best practice across the University. However, there are several data and code repositories where researchers can share outputs for reuse, meaning there is no single source of truth. It could be possible to monitor data sharing across this landscape through ORCID-ID integration or the tool Octopus, but the infrastructure for this is not in place at the moment. Moreover, how FAIR data is (Findable, Accessible, Interoperable and Reusable) acts as a guide to ensure the value of sharing in the long term.
- **Pre-prints.** There is no system in place to record pre-prints and there are discipline-based differences to consider in their use.
- **Authorship statements.** There are constraints with the current system in recording this. When systems are updated/ upgraded it can be reviewed.

Institutional **KPIs** for the **Research Environment**

Whilst this basket of measures are useful for tracking changes in our Research Culture over time, we required a shorter set of measures to be included in the refresh of the Research Strategy KPIs for annual reporting to Council. Those highlighted in green were selected as these five measures, and were approved by URIC and UEB in February 2022.

Evaluating our evaluation

The KPIs have only recently been approved in 2022, and we have yet to go through a full annual cycle of reporting. We plan to evaluate measures once a cycle has been completed and every 2 years after that. This will be led by the Research Strategy team within the University's Research Strategy and Development Service.



Appendix A: University Research Culture Index

Values Driven Domain	What the domain looks and feels like	Options for evaluation: indicators of success (* = University Research Strategy KPI)
Collaboration and Collegiality	Collaboration across Faculties; Support for careers of others, across career stages and job families/ Net contribution - defined as the research you have done and the research you have enabled others to do	Survey questions on Collaboration and Collegiality
		Number of NU grant applications and awards with co-investigators from multiple academic units*
		Network analysis - Scival
		Contributions and uptake of peer review system for grants
Fairness and Inclusion	A diverse research community in terms of protected characteristics; Fair processes and equal opportunity to access support for research and development; Everyone's contributions to research are recognised and valued; there is a strong sense of belonging in the research community – people want to stay	Diversity of Research Committees (link to REC work)
		Gender pay gaps by job families
		Diversity of ethnicity and gender across UKRI population for grant awards and applications*
		Diversity of research community by protected characteristics (prioritised initially by gender and ethnicity)
		Attendance at training on psychological safety and a suite of EDI training (e.g. Active Bystander training). Further measures to be developed on the impact of the training.
		Survey questions on Fairness and Inclusion
Freedom to Grow and Explore	Strong career development opportunities for everyone in our research community; Increase research community empowerment and satisfaction	Concordat ten-day take-up
		Skills Academy measurements to capture engagement and career outcomes (in progress)
		Survey questions on Freedom to Grow and Explore
		PRES summary of overall satisfaction for NU vs Russell Group median (every 2 years) *
		NU completion rates for doctoral students within 4 years*
Openness and Integrity	Increase adoption and advocacy of open research and research integrity	The number of DMPs completed for research projects
		% of Open Research Deposits in NU repository *
		% of FAIR datasets in data.ncl
		Open Research Training Attendance
		Survey questions on Openness and Integrity

Green and * = University Research Strategy KPI

Report **Credits**

Project Team

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Report writing

Report drafted by Sarah Whalley, Candy Rowe and Chris Emmerson, incorporating feedback from Lizzie Gadd.

Acknowledgements

Thanks to Matt McCallum (AHRC- UKRI) who suggested we start with what we value and put us in touch with INORMS. This piece of work would not have been possible without the feedback of colleagues and postgraduate students at Newcastle University who took part in our discussions. We thank everyone for giving us their time.

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Find out more:
[Research Culture | Our Research | Newcastle University \(ncl.ac.uk\)](#)

