

Responsible Research Metrics in the Assessment of Research Quality and Impact

This document details recommendations for the use of responsible research metrics at Edinburgh Napier University relating to the assessment and evaluation of research quality and impact. This applies to all staff in the University who generate or use metrics to assess research activities.

Not all disciplines and career stages can be evaluated in the same way, as the nature of research varies across disciplines. However, metrics can be generated using similar methodologies with suitable acknowledgment and explanation of the context of the research and metric (including biases and limitations) in accordance with the principles detailed below.

Edinburgh Napier University is a signatory of the San Francisco Declaration on Research Assessment and we reject the use of certain quantitative indicators, in particular those that apply at the level of Journal or similar, rather than directly to the piece of research in question.

Research Assessment and Evaluation:

Research assessment is used for multiple reasons across the sector, including for the purpose of external Institutional assessment (REF, league tables, funding agencies); to measure School performance (KPIs) and to evaluate individual performance (appointment, PDR, promotion).

The University uses quantitative and qualitative indicators to assess information about research activities (income, outputs, research degrees supervision) as well as research staff (recruitment, promotion and performance).

Edinburgh Napier University commits to the use of quantitative methods alongside qualitative indicators when assessing the quality of research, which includes appreciation by peers, impact, scale, originality, rigour and significance of the research.

The principles below have been informed by DORA and the UK Forum for Responsible Research Metrics recommendations, as well as by sector good practice relating to research evaluation.

Responsible metrics:

When using metrics it is important to understand the context and limitations of the metric. Responsible metrics can be understood in terms of:

- **Robustness:** basing metrics on the best possible data in terms of accuracy and scope;
- **Humility:** recognizing that quantitative evaluation should support –but not supplant – qualitative, expert assessment;
- **Transparency:** keeping data collection and analytical processes open and transparent, so that results can be tested and verified;
- **Diversity:** accounting for variation by field, using a variety of indicators to reflect and support a plurality of research & researcher career paths;
- **Reflexivity:** recognizing the potential & systemic effects of indicators and updating them in response

Metrics are not a substitute for informed judgement when assessing research quality.

Bibliometric data may be used in processes relating to recruitment, promotion and performance reviews.

Citation data when used should be normalised to the discipline and publication date and should

detail the data source.

The metrics must be used in context, appropriately and should not replace but complement expert opinion on research outputs.

[The Metrics Toolkit](#) is a resource for researchers and evaluators that provides guidance for demonstrating and evaluating claims of research impact.

University expectations on researchers:

Research activity is recorded through the University's research information management system (Worktribe), to ensure all research activity is appropriately and accurately recognised and attributed. Where data is imported from other University systems into Worktribe the data should be checked and updated at source. Academics/Researchers have a key role to play in ensuring their data is accurate and facilitating corrections to records. This includes:

- All relevant outputs (Journal articles, books, research data, software, IP, creative outputs/works)
- Appropriate attribution of credit for outputs based on scholarly contribution, and contribution to research projects
- Impact and evidence
- Research student supervision information

When using data to evaluate research activities, researchers have a responsibility to:

- Use citation analysis tools in a responsible way
- Challenge others who do not use metrics responsibly

Academic/Researcher expectations on the University:

- Ensure transparent, fair and appropriate use of information in research evaluation
- Ensure training and support is available to all who are involved in the assessment of research activities and/or individuals
- Communicate research evaluation methods
- Use appropriate quantitative metrics, either normalised or presented with suitable contextual data

If a researcher considers the use of metrics has been inaccurate/ inconsistent, they should contact the Head of Research Governance in the first instance. This will then be triaged and if appropriate, reported to an appropriate body within the University *eg. Integrity Committee, VP Research and Innovation.*

References

UK Forum for Responsible metrics <https://www.universitiesuk.ac.uk/policy-and-analysis/research-policy/open-science/Pages/forum-for-responsible-research-metrics.aspx>

DORA <https://sfdora.org/>

Metrics toolkit <https://www.metrics-toolkit.org/>

RIO blog post: <https://blogs.napier.ac.uk/rio/using-metrics-to-illustrate-research-impact/>