

Report on the UCL Bibliometrics Policy Consultation

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for the Bibliometrics Working Group
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Summary and next steps

In 2018-19, the UCL Bibliometrics Working Group¹ developed a draft policy on the use of bibliometrics within UCL, particularly in the context of research assessment. We undertook a multi-faceted consultation strategy including a town-hall event, face-to-face department and senior department management meetings, and concluding with the circulation of the draft policy among academic departments along with a survey of academic staff to publicise the draft and seek feedback from the UCL community.

The consultation engaged with interested parties, reaching over half the departments and around 250 individuals. Initial feedback identified a number of potential concerns around the use of metrics and the scope of a policy, but did confirm broad support for the general approach of the policy as proposed. After some final revisions, the Bibliometrics Working Group has agreed that the policy can now be taken forward for formal approval. It is anticipated that it will be brought to Academic Committee in the next term. The final draft is attached to this report.

If and when approved, the policy will be rolled out gradually alongside a set of guidance documents which outline how to put the principles into practice. We are currently working on developing these to ensure they answer practical questions.

Consultation process

In late 2017, a draft metrics policy was produced and circulated among the BWG. This was extensively revised and updated during 2018, including a review by some external metrics specialists, and presented to the UCL community at a town-hall session in December 2018. Following this, the policy was revised to take account of feedback, and a more detailed consultation process began.

Throughout spring and summer 2019, we approached heads of academic departments to gather feedback on the proposals. We received responses from 33 of 58 departments, covering all but one faculty. Overall, we estimate we met with or presented to somewhere between 100-150 individuals. Two key elements raised during the initial discussions were a concern over the limitations of non-quantitative assessment methods (i.e., peer review has its own set of weaknesses), and problems with framing the policy purely in an Open Science context. Changes to the policy were made accordingly.

After the first round of consultation meetings and revisions, we moved on to a wider survey of UCL academic staff, which asked for general opinions on the use of metrics as well as presenting each of the proposed principles. This ran for three months over the summer, and gathered 116 substantive responses. Between the survey responses and the departmental meetings, we had a good number of responses from all faculties, though skewed towards senior academics, and we feel this allows us to treat the responses as broadly representative.

¹ The Bibliometrics Working Group is led by UCL Libraries and OVPR, and includes academic representatives from across the institution.

The survey suggested that metrics do not appear to be widely or uncritically used at UCL, and the survey responses were varied, with a wide range of positions from those emphatically in favour of the use of metrics, to those strongly opposed. However, despite the polarity of these positions, there was a broad consensus in favour of the draft principles – most had over 75% support, with two having noticeably weaker support than the others.

In the policy proper, a few points had significantly weaker support than the others, and after some discussion, two were reworked. One, linking metrics to UCL strategic goals, was removed; respondents were uncomfortable with this and suggested it would be impractical to implement. Another was rewritten to emphasise the importance of allowing users to validate their own publication lists, rather than focusing purely on RPS/IRIS, which many respondents highlighted might not be a suitable source.

Key findings

A number of key findings emerged from the consultation.

- The question of the **link between this policy and the REF** was often raised – in fact, we frequently met with people who assumed this process was purely driven by REF selection issues. We have stressed that this is meant as a general policy for all purposes, and that while it is consistent with the expectations of the REF, it is not limited to that context.
- One of the biggest single issues to emerge was that of using **journal hierarchies as a proxy for research quality**. The policy currently addresses this issue in points 4 and 7; point 7 explicitly prohibits assessment on the basis of quantitative measures for the journal such as the journal impact factor, and point 4 stresses that the quality of the work itself is always more important than the journal. This still allows for the use of qualitative measures (e.g., "this journal has very rigorous review, so...") but places them firmly in a secondary position. Overall, we feel that the survey results indicate that this approach to journal hierarchies is reasonable.
- Earlier drafts of the principles advocated for qualitative methods to take precedence over quantitative, a recommendation in line with REF Guidance and other external papers. However, members of the UCL community voiced concerns about the **potential weaknesses of peer review** (or other qualitative assessment); should we be emphasising this as a gold standard in comparison to citation metrics, given all the issues we know surround peer reviewing? We revised the policy to be clear that both approaches have their merits (and limitations), and these should be considered and balanced depending on the task/context.
- Questions were raised about **the practicalities of enforcing any policy** - how will compliance be monitored, who will monitor it, and whether there would be consequences of not adhering to the policy - and what scope exists for departments or faculties to develop their own approach to assessment outside of, or perhaps in conflict with, the policy. We feel the current approach to the policy allows for discipline-specific flexibility in many contexts, but any changes should be within the context, and in keeping with the spirit, of the policy.

Overview of the policy

The policy has a one-page preamble explaining the need for a metrics policy, highlighting the general issues involved (uncritical use of metrics, difficulty of meaningfully interpreting them) to explain why UCL has chosen to develop a policy. It explains the broader context of the movement surrounding the responsible use of metrics, including the San Francisco Declaration on Research Assessment ([DORA](#)), which UCL signed in 2015, and the policies put forward by Research England for the REF and other funders (e.g., Wellcome's policy on responsible metrics). The preamble also discusses the

issues surrounding metrics in different contexts, emphasising the need for flexibility, and sets out a clear line that UCL will not try to impose metrics in fields where they are not felt to be useful.

The policy proper is set out as eleven principles, starting with very general ones such as the importance of treating metrics as indirect indicators of quality (#1), moving to more practically-focused ones such as the importance of selecting appropriate metrics (#8) and ensuring that metrics do not become targets in their own right (#9). They are deliberately kept broad so as to ensure they are meaningful in a wide range of contexts, but some give specific advice; #6 says that researchers should not be directly compared on the basis of an h-index, and #7 says that individual papers should not be assessed on the basis of journal metrics such as the impact factor.

All the recommendations in the policy are designed to be in keeping with external best practice such as DORA and the Research England REF metrics guidance.

Policy Statement on the responsible use of bibliometrics

DRAFT – Oct 2019 – v9 – as approved by BWG

Bibliometrics is a term describing the quantification of publications and their characteristics. It includes a range of approaches, such as the use of citation data to quantify the influence or impact of scholarly publications. When used in appropriate contexts, bibliometrics can provide valuable insights into aspects of research in some disciplines.

However, bibliometrics are sometimes used uncritically, which can be problematic for researchers and research progress when used in inappropriate contexts. For example, some bibliometrics have been commandeered for purposes beyond their original design. The journal impact factor was reasonably developed to indicate average journal citations (over a defined time period), but is often used inappropriately as a proxy for the quality of individual articles within a journal.

Further, research “excellence” and “quality” are abstract concepts that are difficult to measure directly but are often inferred from bibliometrics. Such superficial use of research metrics in research evaluations can be misleading. Inaccurate assessment of research can become unethical when metrics take precedence over expert judgement, where the complexities and nuances of research or a researcher’s profile cannot be quantified. When applied in the wrong contexts, such as hiring, promotion, and funding decisions, irresponsible metric use can incentivize undesirable behaviours, such as chasing publications in journals with high impact factors regardless of whether this is the most appropriate venue for publication, or discouraging the use of open science approaches such as preprints or data sharing.

As such, UCL has produced a policy and associated guidance on the appropriate use of metrics at UCL. This builds on a number of prominent external initiatives on the same task, including the [San Francisco Declaration on Research Assessment](#) (DORA); the [Leiden Manifesto for Research Metrics](#) and [Metric Tide report](#). The latter urged UK institutions to develop a statement of principles on the use of quantitative indicators in research management and assessment, where metrics should be considered in terms of **robustness** (using the best available data); **humility** (recognising that quantitative evaluation can complement, but does not replace, expert assessment); **transparency** (keeping the collection of data and its analysis open to scrutiny); **diversity** (reflecting a multitude of research and researcher career paths); and **reflexivity** (updating our use of bibliometrics to take account of the effects that such measures have had). These initiatives and the development of institutional policies are also supported or mandated by research funders in the UK (e.g., [UK Research Councils](#), [Wellcome Trust](#), [REF](#)).

This Policy Statement aims to balance the benefits and limitations of bibliometric use to create a framework for the responsible use of bibliometrics at UCL and to suggest ways in which they can be used to deliver the ambitious vision for excellence in research, teaching, and learning embodied in the UCL 2034 strategy.

We recognize UCL is a dynamic and diverse university, and no metric or set of metrics could universally be applied across our institution. Many disciplines or departments do not use research metrics in any way, because they are not appropriate in the context of their field. UCL recognises this and will not seek to impose the use of metrics in these cases. For those fields where metrics are used, this Policy Statement is deliberately broad and flexible to take account of the diversity of contexts, and is not intended to provide a comprehensive set of rules. To help put this into practice, we will provide an evolving set of guidance material with more detailed discussion and examples of how these principles could be applied. UCL is committed to valuing research and researchers based on their own merits, not the merits of metrics.

Principles for the responsible use of bibliometrics

1. Quality, influence, and impact of research are typically abstract concepts that prohibit direct measurement. There is no simple way to measure research quality, and quantitative approaches can only be interpreted as indirect proxies for quality.
2. Different fields have different perspectives of what characterises research quality, and different approaches for determining what constitutes a significant research output (for example, the relative importance of book chapters vs journal articles). All research outputs must be considered on their own merits, in an appropriate context that reflects the needs and diversity of research fields and outcomes.
3. Both quantitative and qualitative forms of research assessment have their benefits and limitations. Depending on the context, the value of different approaches must be considered and balanced. This is particularly important when dealing with a range of disciplines with different publication practices and citation norms. In fields where quantitative metrics are not appropriate nor meaningful, UCL will not impose their use for assessment in that area.
4. When making qualitative assessments, avoid making judgements based on external factors such as the reputation of authors, or of the journal or publisher of the work; the work itself is more important and must be considered on its own merits.
5. Not all indicators are useful, informative, or will suit all needs; and metrics that are meaningful in some contexts can be misleading or meaningless in others. For example, in some fields or subfields, citation counts can estimate elements of usage, but in others they are not useful at all.
6. Avoid applying metrics to individual researchers, particularly metrics which do not account for individual variation or circumstances. For example, the h-index should not be used to directly compare individuals, because the number of papers and citations differs dramatically among fields and at different points in a career.
7. Ensure that metrics are applied at the correct scale of the subject of investigation, and do not apply aggregate level metrics to individual subjects, or vice versa. For example, do not assess the quality of an individual paper based on the impact factor of the journal in which it was published.
8. Quantitative indicators should be selected from those which are widely used and easily understood to ensure that the process is transparent and they are being applied appropriately. Likewise, any quantitative goals or benchmarks must be open to scrutiny.
9. If goals or benchmarks are expressed quantitatively, care should be taken to avoid the metric itself becoming the target of research activity at the expense of research quality.
10. New and alternative metrics are continuously being developed to inform the reception, usage, and value of all types of research output. Any new or non-standard metric or indicator must be used and interpreted in keeping with the other principles listed here for more traditional metrics. Additionally, consider the sources and methods behind such metrics and whether they are vulnerable to being gamed, manipulated, or fabricated.
11. Bibliometrics are available from a variety of services, with differing levels of coverage, quality and accuracy, and these aspects should be considered when selecting a source for data or metrics. Where necessary, such as in the evaluation of individual researchers, choose a source that allows records to be verified and curated to ensure records are comprehensive and accurate, or compare publication lists against data from the UCL IRIS/RPS systems.