IOE – Faculty of Education and Society

UCL

UCL IOE Journal Guide

Introduction

A key strategic priority for the UCL IOE is research excellence and supporting the quality of outputs and publications. Our foundations in research excellence and disciplinary expertise are exemplified by the cutting-edge research undertaken at the IOE on a local, national and global scale. This provides a strong basis from which to sustain and grow our distinctive contribution to education and the wider social sciences, and its continued impact.

This journal guide aims to provide a practical resource to support authors, especially those at the start of their research careers, to assess key aspects of research quality in journal publications and to identify where to publish their research articles.

We recognise that research is increasingly complex as the range and nature of outputs broaden, spanning disciplinary and national boundaries; hence, defining what is 'quality research' is not straightforward. The primary goal of the guide is to, therefore, promote discussion about assessing and producing high quality research outputs. The overall structure of the report is summarised in the diagram in figure 1 on the next page.

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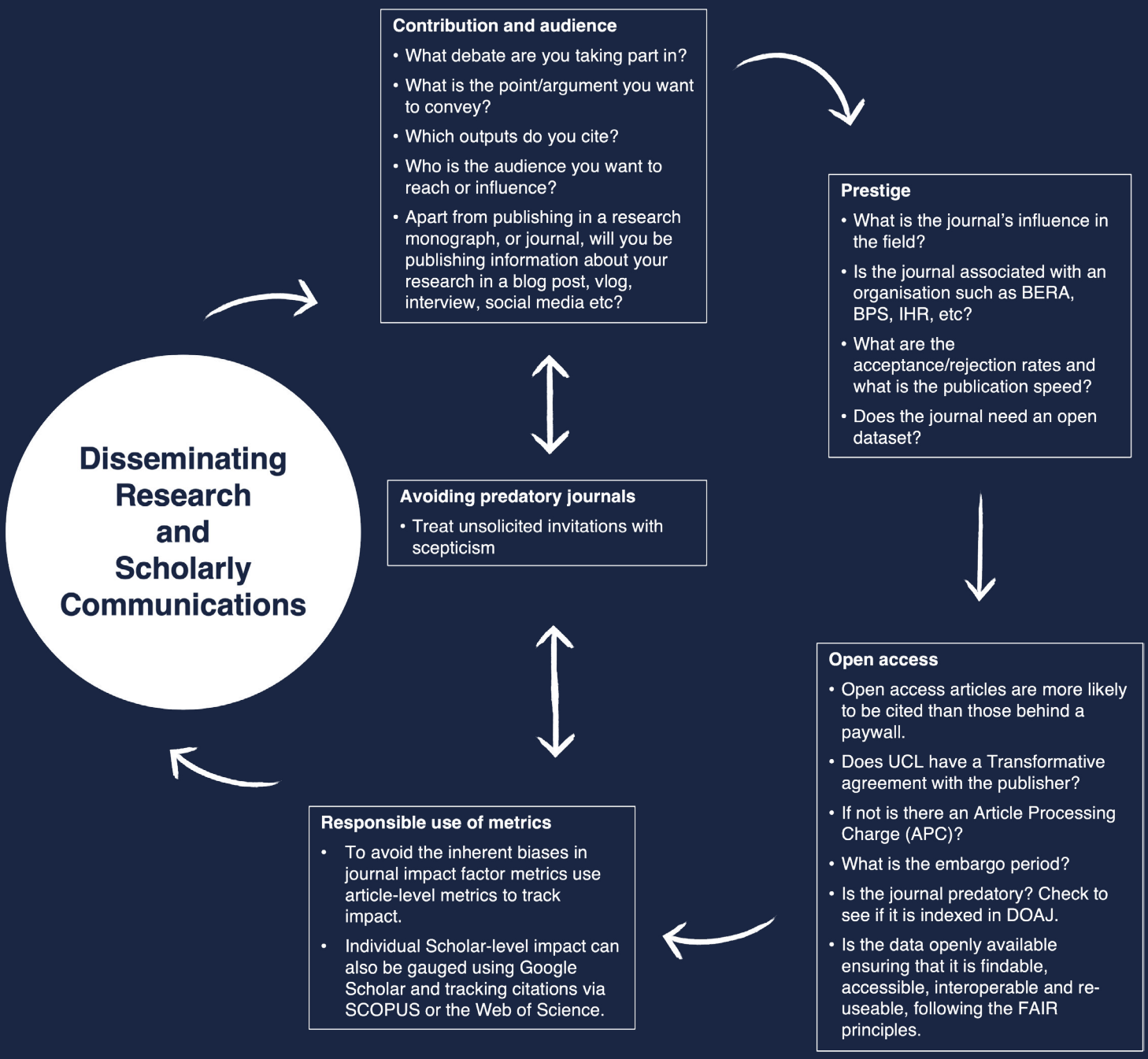
September 2024

Figure 1: Research dissemination and scholarly communications



Research Context

Over the last twenty-five years, the number of researchers in university settings has increased five-fold, and the volume of research outputs has grown by approximately 5% per annum (Emrah Ayan et al., 2023; WordsRated, 2023b). There are now over 47,000 journals available worldwide, with 20,318 provided in open access format (DOAJ, 2023; WordsRated, 2023a). These journals publish over 5 million research articles each year, alongside a parallel increase in the number of research monographs and edited books (Shaw et al., 2022).

With this increase in the number of researchers and the volume of research articles, questions have arisen about the quality of the articles being published and how other researchers, as well as policymakers and practitioners, should choose what to read. This has led, in turn, to questions about whether journal articleswill continue in their current form and, if so, how readers and researchers can assess the quality of individual articles and the editorial processes used by different journals and book publishers (Brembs et al., 2023; Oosterhaven, 2015; Thelwall, 2022).

With these questions being asked and given the limited time available to researchers, policymakers, and practitioners, it is important to consider how the quality of your work will be made evident to these and other readers. Some will rely on word-of-mouth assessments of the reputation of particular researchers, institutions, and research outlets. Others may look to more systematic assessments and quantitative indicators, as detailed later in this guide.

Publishing and Research Impact Strategy

A key reason for publishing research is to contribute to knowledge in the field, which supports both research and personal advancement and reflects the belief that your work can help address real-world problems. Journal articles are the main currency of research and academic exchange in most, but not all, disciplines and subject areas. Publication in a mainstream and established journal is an important way to make your research available to academics, policymakers, practitioners, and lay readers, both when it is published and for years afterwards. It is also the most effective way to ensure that your research findings reach a global audience now and in the future.

After deciding to write up the results of your research project, the next step is to determine the form your publication should take and how it should be published or presented. There is no single or simple answer to this question, but several issues need to be considered before prioritizing different publication routes, as outlined below.

a. Contribution and audience

The first key issue to consider is what idea, theory or debate do you want to contribute to with the results of your research. Journal articles, book chapters, conference papers and other forms of research output will invariably build on the work of other researchers and commentators so one of the first questions you need to consider is whose work are you citing and where does this research appear? This can help you identify the most appropriate journal or group of journals for submission. Similarly, most research will seek to influence the work of others, whether that is other researchers, policymakers, practitioners or the wider public. When considering what you want your contribution to be it is worth considering the following questions. What is original about my contribution? What is the point, argument or thesis that I am going to convey? In what ways are these contributions significant for fellow researchers, policy makers and practitioners? How rigorous, novel and innovative is the research methodology I have adopted?

It is important to consider the audience for the journals you want to publish in. Many journals are associated with scholarly associations and research organisations, which organise conferences and other events as well as maintaining blogs and newsletters, e.g. the British Association for International and Comparative Education (BAICE), the British Education Research Association (BERA), British Psychological Association (BPS), British Sociological Association (BSA) and the Institute of Historical Research (IHR). The websites for these associations will give an indication of the work that they are showcasing and publishing through these different media. To get a better sense of the composition of this audience it is worth reviewing the contents of recent copies of the relevant journal to see who publishes in these outlets. It is also worth considering which of these journals regularly have articles referred to in the relevant specialist press, blogs and podcasts, e.g. *Times Education Supplement, Psychology Today*, or the IOE's Insights podcasts. Alternatively, how can you make the editors and journalists associated with these other forms of communication aware of the research findings in your journal publications. One way of addressing these issues is to seek to involve the end users of the research, whether policymakers, practitioners or other stakeholders in the conduct and writing up of the research as co-developers rather than subjects in the research.

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b. Open access

A key theme in the development of research publication arrangements over the last thirty years has been the steady growth of open access publishing. The growth of open access publishing has been supported by a broad international movement that seeks to grant free and open online access to academic information, such as publications and data. A publication is defined as "open access" when there are no financial, legal or technical barriers to accessing the publication.

Open access journal publication in the UK operates through the green or gold routes. Gold open access describes publications in journals that offer immediate free and full open access however an article publishing charge (APC) is usually charged to the author or funder of the research to enable this type of publication. Under these arrangements the author retains ownership of the copyright and may adopt an open licensing arrangement for the subsequent quoting and use of this material. The level of charges for this service varies between publications so it is important to be clear about these conditions before submitting an article for consideration by the journal's editorial team.

A useful tool when it comes to considering where to publish is the Directory of Open Access Journals (DOAJ) which lists over 30,000 journals published in 80 countries https://doaj.org/. Journal articles which are freely available online are among the most cited by other academics, read by practitioners and referred to by policymakers.

When considering publishing in an open-access journal it is important to be aware that many will apply an article processing charge (APC) or publication fee that may amount to several thousand pounds. UCL has negotiated a series transformative agreements with major publishers to ensure that articles published in these journals are available through open access, but that no charge is levied on the authors for this publication. A full list of the publishers and titles covered by these agreements is available at the following weblink https://www.ucl.ac.uk/library/open-science-research-support/open-access/transformative-agreements/journals-ucls-transformative

c. Prestige and acceptance rates

Studies of higher education activity over many years have drawn attention to the tendency for academics to informally rank and order journals and institutions (Becher & Trowler, 2001; Halsey, 1982; Tight, 2018). When the university and research community was smaller and there were fewer journals, the relative merits of different publications were often part of the unwritten norms of scholarly groups and specialisms. As the research community grew and formal national mechanisms of research assessment were introduced department and subject based journal lists and rankings began to emerge to help research authors assess the "relative quality" of journals in particular subject areas. In the early 2010s widespread concern about the efficacy of using journal lists and rankings led them being prohibited in research evaluation exercises like the REF. There have also been a number of international declarations and policy statements drawing attention to the inherent biases associated with these tools with a strong recommendation to institutions and individuals that these lists and rankings are not used.

The acceptance/rejection rate of a journal is a measure which is often associated with its prestige. A recent non-peer-reviewed study of journal acceptance rates at 2,300 journals by Reed Elsevier found that the journal average acceptance rate was 32%, with a range that varied from 1% to 92%. Beyond these headline figures they also found that:

- Bigger journals have lower acceptance rates than smaller journals, typically between 10-60%
- Older journals have lower acceptance rates than newer journals, typically between 5-50% acceptance.
- Open access journals have higher acceptance rates than journals with limited open access.
- There was no relationship between the scope of a journal and its acceptance rate, although the most common reason for rejection was a desk decision taken by the editor that the proposed paper fell outside the aims and scope of the journal. This can account for up to 80% of rejections.

The acceptance rates for journals appear to have declined in recent years as the increase in the number and size of journals has not kept up with the growth in the number of researchers, or the volume of work they have produced. These changes have also impacted the time taken from an initial decision to review to the final acceptance and publication of a paper, which can now commonly take between nine months and a year. One common way of dealing with these challenges is to consider drawing up a list of three journals that you could submit your article to in order of importance. You might then begin by submitting to the journal with the most appropriate audience and prestige even if the acceptance rate is very low. If the article is not accepted at the editorial desk review stage then you can submit to an alternative journal with slightly less perceived prestige, but still with a relevant audience. In response to these author strategies several publishers have developed *"cascade journals"* where authors will be encouraged to submit if their first choice of journal has not accepted their article.

Research funders have been keen to facilitate the wider use of the large datasets that they have supported researchers to create through initiatives which are often referred to as open data. This interest in making data more easily available has combined in recent years with concern about the replicability of research, especially in the fields of psychology and biomedicine. These pressures have led a growing number of journal editors to encourage submitting authors to make their data available online in a format which is FAIR, i.e. findable, accessible, interoperable and re-useable.

d. Avoiding predatory journals

The rapid growth in the number and size of journals over the last twenty years has led to an increase in what have been labelled predatory journals and predatory practices. There is no single agreed list of the predatory editorial behaviours and it is not always easy to spot predatory practices. For example, most predatory publishers will have an ISSN (International Standard Number) for the journal(s) they represent and will assign a DOI to their individual article outputs. They also often look like or take on names that are similar to other journals, with minor variations that may trap the unwitting into believing they are publishing in key journals. They also rarely have a bona fide peer review system in place or if they do, it is superficial. Most will have websites that list academics at various universities and often these academics' names and profiles have been misappropriated (Shen & Shah, 2023).

A common predatory practice is the solicitation of articles from prospective authors through email invitations and the adoption of limited or ineffective review and refereeing procedures. In the most egregious examples of predatory behaviour, it has been alleged that journals have been established primarily to obtain large article processing charges (APCs) from prospective authors for publication in journals which are held in poor esteem and rarely consulted by other academic researchers. Indeed, recent research has revealed that there is no association between the APCs and the level of journal article citation (Borrego, 2023).

If you have concerns about a journal it is important to check a few key details before you make any commitments to publish with that title. Ask other researchers in your specialism for their views about the journal. Look at the journal URL. Check whether it is registered in one or more of the main journal aggregators. Review the membership of the journal editorial board and see whether prominent members of the board also list this affiliation on their own institutional or personal websites.

The brief description of predatory practices outlined above reveals some of the difficulties in defining this approach categorically. The editors of several highly regarded mainstream journals regularly advertise themed special issues where they invite researchers with a known track record or interest in a subject to submit an article for publication. Similarly, the need to publish and disseminate research quickly in a number of research specialisms and in circumstances like the Covid pandemic has led to a steady increase in the number of pre-print servers which publish articles with minimal initial refereeing. The speed of publication and the shortened review process is then frequently complemented with Open Review arrangements which provide for comments to be lodged by readers. This move to Open Review has also been adopted by many mainstream journals which publish the reviews of referees on an anonymous basis.

Finally, it is worth mentioning the growth of Mega journals which accept articles from researchers in a wide range of different subject areas and specialisms and often publish these articles alongside one another. It is difficult to judge definitively and finally on the quality of the articles published in these journals, or on the editorial processes employed. In some of the largest journals the editorial process is run by full-time professional staff and in others by a mix which includes academics, policymakers and practitioners, however, word of mouth assessment of the prestige of these journals and by implication the articles published in them varies considerably. Examples of the more prestigious mega journals currently publishing articles include: BMJ Open in medicine and healthcare, IEEE in electrical and electronic engineering, the Open Library of Humanities and the UCL Press Mega Journal (UCL, 2018). However, not all Mega Journals are held in equal esteem, and because perceptions of individual titles vary and change significantly over time it is worth asking for advice from an experienced researcher in the field before committing to publishing in any journal you have any concerns about.

e. Responsible use of metrics

Citation records have been a feature of academic research for many decades, but the move to online publishing has placed a greater emphasis on these measures of research impact. These measures have a number of inherent biases and therefore should be used with caution and responsibly. Citation indexes measure the number of times an article is referenced by other articles in a publisher or journal aggregator's database. These measures can then be used to identify articles which may be of interest to researchers working in the same specialist area. They can also be used to identify the researchers and journals which are most cited in a particular area of inquiry. Many online databases and search tools provide an option or operate by default on the basis of displaying articles by reference to the number of times they have been cited by others, e.g. Google Scholar, Mendeley, Scopus and Web of Science. The increasingly widespread use of these tools means that among the most visible, widely read and commonly cited articles are those that appear in the journals indexed in these databases. This may then have an impact on the perceived status of these journals and the people that publish in them.

Many journal websites and databases provide statistics detailing the number of times an article has been accessed and downloaded, and some will provide details of the amount of time readers spend looking at a particular item online. This will give you a sense of the influence of the journal on academics in the field. Services such as Plum Analytics (on Scopus) and Altmetric.com track and monitor the number of times an article has been referred to on X/twitter, blogs and other social media as well as more mainstream news outlets. These metrics may be useful later in providing evidence of engagement and impact. This is particularly important when seeking to communicate with policymakers and practitioners. Here the key issues are not only the

type and focus of the chosen publication, but also the language which is used to communicate ideas and proposals.

One area of publishing practice which has attracted considerable attention in recent years has been the use of research metrics to assess the "quality" of the publication track record of individual researchers, journals, departments and institutions. The scale and form of this interest has varied between institutions and countries over time with several institutions providing comparative information to influence expectations or targets for researchers. Examples of this type of approach are evident in Australia, Brazil, China, Denmark, Finland, Italy, Norway, Poland, and Turkey (Kulczycki et al., 2022).

The level of support and opposition to using bibliometric citation measures to assess research articles, researchers, journals and institutions has varied between subject areas, with many in STEM and economics subject areas more in favour of these approaches than their colleagues in the arts, humanities and other social sciences (Nederhof, 2006).

Table 2: Bibliometric measures by level of analysis

Article, e.g. Altmetric, Google Scholar, Scopus and Web of Science.

Individual, e.g., Total citations, Hirsch (H) index, G Index and the i10 index. Google Scholar provides analysis of individual researchers using these measures.

Journal, e.g., CiteScore (Elsevier), EigenFactor, Journal Impact Factor (Clarivate), and Source Normalised Impact per Paper (SNIP). Note UCL Bibliometric Policy advises against the use of journal impact factors https://www.ucl.ac.uk/research/sites/research/files/metrics_to_avoid_-_the_impact_factor.pdf. However, these sources can be used to identify the top quartiles of journals by citation.

Institution, e.g., CWTS Leiden Ranking which lists the most highly cited 1, 5 and 10% papers https://www.leidenranking.com/ranking/2023/list. The QS League Table places a 20% weighting on individual academic citation. https://support.qs.com/hc/en-gb/articles/4411823040018-Processing-of-citations-and-papers. The Times Higher World Ranking uses an 18% weighting for institution average citation scores https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2024-methodology

At the level of individual academics and institutions, concern about the use of journal lists and citation metrics led to the development of the San Francisco Declaration on Research Assessment and the Leiden Manifesto (DORA, 2012; Hicks et al, 2015). The Declaration on Research Assessment (DORA) was drafted in 2012 by a group of academics and publishers active in the field of cell biology(Hatch & Curry, 2020). In the preamble to the declaration, it is noted that Journal Impact Factors (JIFs) were originally created as a tool to help librarians identify journals to purchase, not as a measure of the scientific quality of research in an article. The declaration then goes on to draw attention to the following five problems with using this measure to determine the quality of a research article, an individual researcher's publications, or the quality of work within an academic department.

- Citation distributions within journals are highly skewed:
- the properties of a JIF are subject and field specific;
- the politics of citation mean that there are gender and institutional differences which may reflect prejudicial views;
- negative citations attract counts in the same way as positive references;
- journals consist of diverse article types, including research papers and reviews;
- JIFs can be manipulated (or "gamed") by editorial policy; and
- data used to calculate JIFs is not transparent or available publicly (DORA, 2012).

Based on this analysis, DORA recommends that journal-based metrics should not be used to measure the quality of individual research articles, assess individuals in hiring and promotion decisions, or make funding decisions. It suggests instead that the criteria used in these decisions should be made explicit and that the value of all types of research output should be respected (e.g. datasets and software). To date, DORA has been signed by 24,488 individual and institutional signatories in 165 countries.

In response to the publication of DORA, Hicks and others published the Leiden Manifesto in 2015 outlining ten principles for effective and ethical research assessment. Four years later, the World Congress on Research Integrity published the Hong Kong Principles with five elements to encourage individual academic career advancement and institutional development with a focus on integrity. IIn 2020 the Office of Open Science and Scholarship at UCL published the institution's Bibliometric Policy following extensive consultation within the University. It provides a framework for understanding the benefits and limitations of bibliometrics and advocates for the responsible use of metrics.

In 2022, the UK's four higher education funding bodies (i.e., DELNI, HEFCE, HEFCW and SFC) commissioned a review of the Research Excellence Framework (REF) 2021 shortly after the results in May of that year (Grove, 2022). The review was conducted under the heading of the Future Research Assessment Programme (FRAP) and included a reconsideration of the possible use of metrics in the next research evaluation exercise (FRAP, 2022).

The review was supported by the UK Forum for Responsible Research Metrics (FRRM) which is a UKRI sponsored group with representatives from Research England and a range of university researchers with expertise in the use of metrics (FFRM, 2022). The FRRM Group recommends that any use of research metrics is done in accordance with the following five principles.

- **Robustness** – basing metrics on the best possible data in terms of accuracy and scope.
- **Humility** – recognising that quantitative evaluation should support, but not supplant, qualitative expert assessment.
- **Transparency** – ensuring that those being evaluated can test and verify the results.
- **Diversity** – accounting for variation by research field and using a range of indicators to reflect and support a plurality of research and researcher career paths across the system.
- **Reflexivity** – anticipating the systemic effects of indicators and updating them in response.

Leiden Manifesto	Hong Kong Principles
1. Quantitative evaluation should support qualitative, expert assessment.	**1.** Assess responsible research practices
2. Measure performance against the research missions of the institution, group or researcher	**2.** Value complete reporting
3. Protect excellence in locally relevant research	**3.** Reward the practice of open science
4. Keep data collection and analytical processes open, transparent and simple	**4.** Acknowledge a broad range of research activities
5. Allow those evaluated to verify data and analysis	**5.** Recognise essential other tasks like peer reviewing and mentoring
6. Account for variation in publication and citation practices	
7. Base assessment of individual researchers on a qualitative judgement of their portfolio	
8. Avoid misplaced concreteness and false precision	
9. Recognise the systematic effects of assessment and indicators	
10. Scrutinise indicators regularly and update them.	

Source: (Hicks et al, 2015; WCRIF, 2019)

The continued growth in the number of journals and research articles throughout the 2010s and 2020s and the growth of pre-prints, open research, open data, open science and open reviewing processes has prompted renewed interest in journal lists. This interest has also been encouraged by the “replicability crisis” in psychology, an increase in article retractions and some high-profile research hoaxes (Chen et al., 2023; Koerber et al., 2023). The emphasis in more recent commentaries which are supportive of the use of journal lists has been on using a wide range of transparent measures of the editorial process which are robust and open to discussion and challenge. The aim of these “watch lists” and “safe lists” is to help early career researchers to find the best outlets for their research papers, for librarians to consider the completeness of their collections and for lecturers to refer their students to in future. To aid this task several online databases have been developed to enable researchers to look up the key features of the journals where they are considering submitting articles or becoming involved as a reviewer or editorial board member:

Clarivate Web of Science - https://www.resurchify.com/ (access via UCL Library databases)

Elsevier Scopus - https://www.elsevier.com/en-gb/products/scopus (access via UCL Library databases)

Open Alex – https://openalex.org/ (this is still being developed)

Outputs & the Research Excellence Framework (REF)

One way in which the overall quality of university-based research is evaluated in the UK is the Research Excellence Framework (REF). The REF is a UK-wide assessment of the quality of research published or presented by university-based academics over the previous five to seven years. Over the last twenty-five years, the number of researchers submitted to successive REF exercises and its predecessor, the Research Assessment Exercise (RAE), increased by 58.5%, from 48,022 in 2001 to 76,132 in 2021. In the field of education, the number of researchers increased by a more modest but still substantial 15.7%, from 2,045 to 2,367. Despite this smaller proportional increase, education remained the third-largest group of researchers submitted to the REF in 2021.

Increases in the number of researchers submitted to the RAE in 2008 led to the adoption of a new approach to quality ratings in REF2014, with a relaxation in the number of outputs required from each full-time equivalent member of staff with a research or teaching and research contract. From that point onwards, the number of outputs expected was reduced from 4 to 2.5 within the census period. This, in turn, prompted an increase in the proportion of journal articles submitted by education departments, especially by those achieving the highest-rated quality profiles, whether measured by Grade Point Average (GPA) or Research Power (RP). Consequently, high-quality journal articles have become the central currency of REF exercises, now accounting for 78% of research outputs submitted.

The REF process is particularly important for Early Career Researchers (ECRs) as it provides an opportunity for newer staff members to develop their research expertise and demonstrate their achievements by contributing to the outputs and impact case studies submitted to this exercise. Table 1 identifies the key criteria used in the last Education REF exercise to assess the quality of research outputs, commonly journal articles and books in the field of education, but also applied to a range of other types of publication as detailed in table 1. Table 2 identifies the key criteria used in the last Education REF exercise to assess the quality of research outputs, commonly journal articles and books in the field of education, but also applied to a range of other types of publication as detailed in table 1

At the time of writing this guide, the final form of the REF2029 is not yet known. The interim report based on the FRAP consultation was published in December 2023 (REF2029, 2023). This report recommended an extension of the reference period to 2029 and a new census date of 31st December 2028. The report did not provide a clear statement on the role of metrics in the next REF, but some further indications are expected in late 2024.

Table 1: Output type percentages

Output Type	Education (UoA23)
A. Authored book	11.9%
B. Edited book	0.4%
C. Chapter	7.1%
D. Journal article	78.0%
E. Conference	0.2%
F. Patent, **G.**Software, **H.**Website, **I.**Performance, **J.**Composition, **K.**Design, **L.**Artefact, **M.**Exhibition	-
N.Research report	1.6%
O. Devices and products, P.Digital Media, Q.Scholarly Edition, R.Research dataset	-
U. Working paper	0.1%
Other	0.3%
Total number of outputs	**5,278**

REF (2022) Overview report by Main Panel C and Sub-panels 13 to 24, https://2021.ref.ac.uk/media/1912/mp-c-overview-report-final-updated-september-2022.pdf

Table 2: Output type percentages

Unclassified	REF-1 Star	REF-2 Star	REF-3 Star	REF-4 Star
Research will be graded as 'unclassified' if it falls below the quality levels described above or does not meet the definition of research used for the REF.	Providing useful knowledge, but unlikely to have more than a minor influence.	Providing important knowledge and the application of such knowledge.	Novel in developing concepts, paradigms techniques or outcomes.	Novel in developing concept, paradigms, techniques or outcomes.
			An important point of reference.	A primary or essential point of reference.
	An identifiable contribution to understanding, but largely framed by existing paradigms or traditions of enquiry.	Contributing to incremental and cumulative advances in knowledge.	Contributing very important knowledge, ideas and techniques which are likely to have a lasting influence on the intellectual agenda.	A formative influence on the intellectual agenda.
	Competent application of appropriate research design and techniques of investigation and analysis.	Thorough and professional application of appropriate research design and techniques of investigation and analysis.	Application of robust and appropriate research design and techniques of investigation and analysis.	Exceptionally rigorous research design and techniques of investigation and analysis.
			Generation of substantial data set or research resource.	An exceptionally significant data set or research resource.

REF (2019) Panel criteria and working methods, https://2021.ref.ac.uk/media/1450/ref-2019_02-panel-criteria-and-working-methods.pdf

The dates used in the two references above relate to the date of the publications not to the date of the REF exercise which was 2021.

Support available at UCL

The following staff who work in **Library, Culture, Collections and Open Science** are available to support you.

Research support

Dr. Nazlin Bhimani, Research Support & Special Collections Librarian Email: nazlin.bhimani@ucl.ac.uk

Bibliometrics support

Andrew Gray, UCL's Bibliometrics Support Office

Email: andrew.gray@ucl.ac.uk

Bibliometrics Policy: https://www.ucl.ac.uk/library/open-science-research-support/bibliometrics/ucl-bibliometrics-policy

Library guides on research metrics https://library-guides.ucl.ac.uk/research-metrics

https://library-guides.ucl.ac.uk/research-metrics/using-understanding-metrics;

https://www.ucl.ac.uk/research/sites/research/files/guidance_on_using_metrics_to_compare_journals_1.pdf

Transformative agreements, RPS, discovery, profiles

Open Access at UCL

Email: openaccess@ucl.ac.uk

Website: https://www.ucl.ac.uk/library/open-science-research-support/open-access

Transformative agreements: https://www.ucl.ac.uk/library/open-science-research-support/open-access/open-access-funding-and-agreements/transformative

RPS: https://rps.ucl.ac.uk

UCL Discovery: https://discovery.rps.ac.uk

UCL Profiles: https://profiles.ucl.ac.uk/

Open data repository team

Email: researchdatarepository@ucl.ac.uk.

Help with Research Data Management Plans: lib-researchsupport@ucl.ac.uk.

Website: https://www.ucl.ac.uk/library/open-science-research-support/research-data-management/ucl-research-data-repository

UCL Data Repository: https://rdr.ucl.ac.uk

Definitions and useful links

Acceptance rate – The acceptance rate is a measure of the number of manuscripts are accepted for publication compared to number submitted and is usually expressed as a percentage. For example, a journal which accepted 60 out of 500 papers submitted in 2024 will have an acceptance rate of 12%. The journal acceptance rate is usually published alongside a measure of the average time taken for an editorial decision to be taken on accepting or rejecting an article/ This measure is normally expressed as the time taken from "receipt to first decision" and time taken from "receipt to online publication." These measures are particularly important for researchers engaged in topical and time critical research.

Altmetric Badge. The Altmetric system tracks engagement with published research and its impact on other forms of communication, including tweets, blog mentions, news media, social bookmarking, article views and downloads. The Altmetric badge system enables researchers to embed digital links in the form of badges to measures of the engagement and impact of their research, https://www.altmetric.com/our-audience/researchers.

Cabell's Directories. This directory lists publishing opportunities in several fields including Education, Health and Psychology. It includes information on the style and format required by different journals as well as the review process used, e.g. one stage acceptance for review or desk rejection or two stage, submission of abstract or synopsis and then invitation for a full paper. This directory also includes a list of journals that have been flagged as predatory Cabell's Directories

Circulation and/or content views. This is a measure of the number of online accesses to the journal and may include measures of the time spent on an article by someone accessing the resource online.

CiteScore. This measure of impact is produced by Scopus and provides a measure of the average citations per document that a journal receives over a four-year period divided by the number of documents in the same 4-year period, http://www.scopus.com.

Directory of Open Access Journals (DOAJ) an index of open access journals from around the World https://doaj.org/

Eigen Factor - The Eigenfactor measures the influence of a journal based on whether it's cited within other reputable journals over five years. A citation from a highly cited journal is worth more than from a journal with few citations. The Eigen Factor project was established in 2007 by Carl Bergstom and Jevin at the University of Washington to track and analyse trends in journal publication, http://www.eigenfactor.org.

Five Year Impact Factor - The average number of times articles from the journal published in the past five years have been cited in the JCR year. It is calculated by dividing the number of citations in the JCR year by the total number of articles published in the five previous years https://incites.help.clarivate.com/Content/Indicators-Handbook/ih-5-year-jif.htm.

G Index – The G Index is a measure of the number of articles that have been cited by that number of articles squared. As an equation it can be expressed as: $G = Gn^2$. A G Index of 10 means that the researcher in question has published 10 articles with combined citations of at least 100. The G index unlike the H index

rewards researchers with a small number of highly cited articles (Egghe, 2006).

H-Index – The H index is a measure of the number of articles that have the same number of citations or higher. For example, an H index of 20 would be scored if at least 20 articles had 20 citations (Poirrier et al., 2021).

i10 Index – This measure is used by Google Scholar to calculate the number of a researcher's articles which are cited by at least 10 other publications. It is a simple and straightforward measure which is easy to understand and easily accessible to other researchers. The drawbacks are that the My Citations feature in Google Scholar can misattribute research and under record or over record activity. You can set up and amend your profile in Google Scholar at the following site https://scholar.google.com/intl/en/scholar/citations.html#overview

Journal Impact Factor. This is a field normalised measure of citation produced by Clarivate Web of Science in their Journal Citation Reports (JCR). The Journal Impact Factor measures the frequency with which the "average article" in a journal has been cited in a particular year or period. The annual JCR impact factor is a ratio between citations and recent citable items published https://clarivate.com/webofsciencegroup/essays/impact-factor/

League Tables. A number of international university league tables now use citation metrics as a guide to the rating and ranking of institutions, e.g., The CWTS Leiden Ranking measures the most highly cited 1, 5 and 10% papers per institution https://www.leidenranking.com/ranking/2023/list. Similarly, the QS League Table includes a 20% weighting for measures of individual citation. https://support.qs.com/hc/en-gb/articles/4411823040018-Processing-of-citations-and-papers.

Meanwhile, the Times Higher World Ranking includes an 18% weighting for a measure of an institution's average citations https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2024-methodology. Unsurprisingly, these measures tend to favour institutions with a significant science, technology, engineering and medicine (STEM) base. Notwithstanding this and other biases there is evidence of national governments and individual universities managements globally adapting their hiring and promotion criteria to reflect the growing emphasis on these measures. This change is driven by a recognition of the importance of league tables in the decisions of international students about where to study. It is also a recognition of the importance of these measures in national research policies and strategic aspirations.

Open access – This means that a journal article is available free of charge to the reader. Open Access operates through the green or gold open access routes. Gold open access describes publications in journals that offer immediate free and full open access however an article publishing charge (APC) is usually charged to the author or funder of the research to enable this type of publication. Under these arrangements the author(s) retain ownership of the copyright and may adopt an open licensing arrangement for the subsequent quoting and use of this material. The level of these charges for this service varies between publications so it is important to be clear about these conditions before submitting an article for consideration by the journal's editorial team.

Open data – A growing number of journals provide support for researchers who wish to archive and store the research data that underpins their paper on the publisher's website or a similar archive. This facility is there to enable other researchers to use this data, subject to any conditions applied by the author(s) or publisher.

Open review – does the journal provide for the publication of anonymised referee reports and/or post publication reviews by others.

Research Excellence Framework (REF) Assessment by the UK's four national research funding bodies every five to seven years of the research undertaken by university-based researchers. Research is submitted in Units of Assessment (UoA) aligned with disciplines and subjects, *i.e. education, psychology and sociology.* The results of this exercise in 2021 were reported as profiles of activity under the headings of environment, impact and outputs, but frequently summarised as a grade point average (GPA) and research power (RP). Each element of the a REF submission from a UoA is rated by on a five point scale from 0 to 4 star, with intervening scores of 1, 2 and 3. The GPA is calculated by multiplying the percentage of research rated 4* by 4, the percentage of 3* research by 3, the percentage of 2* research by 2 and the percentage of 1* research by 1; those figures are added together and then divided by 100 to give a score between 0 and 4. The RP is calculated by multiplying the GPA by the total number of full-time equivalent staff associated with the UoA.

Review speed – number of days to review an article from acceptance to first decision and to publication online.

Scimago Journal Rank (SJR) is a measure of the prestige of scholarly journals. SJR scores are computed using network analysis of citations received by journals. The methodology accounts for number of citations as well as the source of citations, with citations from high prestige journals being worth more than those from journals with lower prestige. The prestige value depends on the field, quality and reputation of the source journals that citing article is published in.

Source-normalized Impact per paper (SNIP) is a field normalised assessment of journal impact. SNIP scores are the ratio of a source's average citation count and 'citation potential'. Citation potential is measured as the number of citations that a journal would be expected to receive for its subject field.

Transformative agreements between universities and other institutions with publishers provide a means of paying for the publication of articles in subscription journals to allow full open access. The open access costs are part of an overall UCL payment for subscriptions and publishing. Transformative agreements allow current UCL corresponding authors to publish Gold open access. A list of journals covered by these agreements at UCL is available at: https://www.ucl.ac.uk/library/open-science-research-support/open-access/open-access-funding-and-agreements/transformative

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References

Becher, T., & Trowler, P. (2001). *Academic Tribes and Territories* (2nd ed.). McGraw Hill.

Borrego, Á. (2023). Article processing charges for open access journal publishing: A review. *Learned Publishing*, *36*(3). https://doi.org/10.1002/leap.1558

Brembs, B., Huneman, P., Schönbrodt, F., Nilsonne, G., Susi, T., Siems, R., Perakakis, P., Trachana, V., Ma, L., & Rodriguez-Cuadrado, S. (2023). Replacing academic journals. *Royal Society Open Science*, *10*(7). https://doi.org/10.1098/rsos.230206

Chen, L. X., Su, S. W., Liao, C. H., Wong, K. S., & Yuan, S. M. (2023). An open automation system for predatory journal detection. *Scientific Reports*, *13*(1). https://doi.org/10.1038/s41598-023-30176-z

Diamond, A. (1989). The core journals in economics Current Contents. *Current Contents*, *21*, 4–11.

DOAJ. (2023, January 11). *Directory of Open Access Journals*. https://doaj.org/

DORA. (2012). *San Francisco Declaration on Research Assessment*. https://sfdora.org/read/

Egghe, L. (2006). Theory and practise of the g-index. *Scientometrics*, *69*(1). https://doi.org/10.1007/s11192-006-0144-7

Emrah Ayan, D., Haak, L., & Ginther, D. (2023). How many people in the world do research and development? *Global Policy*, *14*(2), 270–287.

FFRM. (2022, December 20). *The UK Forum for Responsible Research Metrics*. Universities UK. https://www.universitiesuk.ac.uk/topics/research-and-innovation/uk-forum-responsible-research-metrics

FRAP. (2022). *The Metric Tide Revisited.* https://responsiblemetrics.org/2022/08/11/the-metric-tide-revisited/

Grove, J. (2022, May 12). REF 2021: Quality ratings hit new high in expanded assessment. *Times Higher Education.* https://www.timeshighereducation.com/news/ref-2021-research-excellence-framework-results-announced

Halsey, A. H. (1982). The Decline of Donnish Dominion? *Oxford Review of Education*, *8*(3). https://doi.org/10.1080/0305498820080301

Hatch, A., & Curry, S. (2020). Research Culture: Changing how we evaluate research is difficult, but not impossible. *Elifesciences*. https://elifesciences.org/articles/58654

Hicks, D., Wouters, P., Waltman, L., De Rijcke, S., & Rafols, I. (2015). Bibliometrics: The Leiden Manifesto for research metrics. In *Nature* (Vol. 520, Issue 7548). https://doi.org/10.1038/520429a

Koerber, A., Starkey, J., Ardon-Dryer, K., Cummins, G., Eko, L., & Kee, K. (2023). *The Predatory Paradox Ethics, Politics, and Practices in Contemporary Scholarly Publishing*. Open Book Publishers.

Kulczycki, E., Huang, Y., Zuccala, A. A., Engels, T. C. E., Ferrara, A., Guns, R., Pölönen, J., Sivertsen, G., Taşkın, Z., & Zhang, L. (2022). Uses of the Journal Impact Factor in national journal rankings in China and Europe. *Journal of the Association for Information Science and Technology*, *73*(12). https://doi.org/10.1002/asi.24706

Nederhof, A. J. (2006). Bibliometric monitoring of research performance in the social sciences and the humanities: A review. *Scientometrics*, *66*(1). https://doi.org/10.1007/s11192-006-0007-2

Oosterhaven, J. (2015). Too many journals? Towards a theory of repeated rejections and ultimate acceptance. *Scientometrics*, *103*(1). https://doi.org/10.1007/s11192-015-1527-4

Open Science and Research Support. (2020). *UCL Bibliometric Policy*. https://www.ucl.ac.uk/library/open-science-research-support/bibliometrics/ucl-bibliometrics-policy#:~:text=The%20policy%20outlines%20principles%20for,used%20to%20assess%20individual%20publications.

Poirrier, M., Moreno, S., & Huerta-Cánepa, G. (2021). Robust h-index. *Scientometrics*, *126*(3). https://doi.org/10.1007/s11192-020-03857-z

REF2029. (2023, December 7). *Initial decisions next steps December 2023*. https://www.ref.ac.uk/news/update-on-initial-decisions/

Shaw, P., Phillips, A., & Gutiérrez, M. B. (2022). The Death of the Monograph? *Publishing Research Quarterly*, *38*(2). https://doi.org/10.1007/s12109-022-09885-2

Shen, C., & Shah, L. (2023). Predatory publishing practices: what researchers should know before submitting their manuscript. *UKSG Insights*, *36*. https://insights.uksg.org/articles/10.1629/uksg.631

Thelwall, M. (2022). Can the quality of published academic journal articles be assessed with machine learning? *Quantitative Science Studies*, *3*(1). https://doi.org/10.1162/qss_a_00185

Tight, M. (2018). Higher Education Journals: their characteristics and contribution. *Higher Education Research and Development*, 607–619.

UCL. (2018, January 16). *UCL launches open access mega journal to help solve world's biggest challenges.* UCL News. https://www.ucl.ac.uk/news/2018/jan/ucl-launches-open-access-

megajournal-help-solve-worlds-biggest-challenges

WCRIF. (2019, June). ***Hong Kong Principles***. https://www.wcrif.org/guidance/hong-kong-principles

WordsRated. (2023a, January 11). ***Number of Academic Papers Published Per Year***. https://wordsrated.com/number-of-academic-papers-published-per-year/

WordsRated. (2023b, June 1). ***Number of academic papers published per year***. WordsRated. https://wordsrated.com/number-of-academic-papers-published-per-year/

Acknowledgements

We would like acknowledge the input and support of IOE Director of Strategy, Policy and Public Affairs, IOE Heads of Research, Heads of Departments and wider colleagues who have contributed to the drafting of the guide.

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To cite this publication please use:
IOE, UCL's Faculty of Education and Society (2024).
IOE Journal Guide. London: UCL

All information is correct at the time of publication