

# The Open Access Journals Toolkit

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#### Notes for readers

This version of the Open Access Journals Toolkit was last updated in June 2023 and was downloaded from Zenodo at: <u>https://doi.org/10.5281/zenodo.8017033</u>. The live version is available at <u>www.oajournals-toolkit.org</u>. This work has been supported by the Open Access Scholarly Publishing Association (OASPA) and the Directory of Open Access Journals (DOAJ).

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## **Getting Started**

## Scope, aims and focus

Topic leads: Susan Murray, Solange Santos, Rebecca Wojturska

The scope and aims of an academic journal include a brief explanation of the main reason it exists. The focus of a journal is usually on a specific research discipline or field of study, sometimes within a particular geographical region. Explaining a journal's scope and aims simply and clearly is important to all authors, reviewers, contributors and for the team running the journal. A clear scope and aims will also support better discoverability via search engines.

Clearly outlining a journal's scope and aims enables readers to swiftly grasp its relevance and ensures prospective authors submit pertinent manuscripts. This streamlines the process, saving time and effort for both authors and the journal's managers.

#### Key components of a scope and aims statement

Typically, online journals have a dedicated 'Scope' or 'Aims & Scope' page, where this information is presented to readers. Typically, such a page would outline the journal's unique objectives and the journal's target demographic of scholars and practitioners. In some cases, the scope statement may describe the reasons the journal was founded as well as any specific focus, such as the subject area(s) and, potentially, geographic regions that the journal seeks to target (e.g. national vs international circulation).

It is recommended that the scope statement also cover the types of content accepted (e.g. original research articles, book reviews), the publishing model (for example diamond open access) of the journal as well as the chosen peer review policy (e.g. double blind, open). Other features that should be described include <u>publication frequency</u> and <u>article selection criteria</u>.

#### Setting and maintaining a journal's scope and aims

While a new journal may be inclined to adopt a broad, multidisciplinary focus to attract more submissions, it is generally advisable to adopt a precise and targeted approach for the journal's covered topics. This is primarily because new journals often emerge as a response to a perceived gap in the existing coverage of a research field.

For journals that are already well-established, it is advisable to occasionally revisit the scope, aims and focus to ensure that they remain accurate and relevant.



## Choosing a title for your journal

Topic leads: Susan Murray, Rebecca Wojturska, Solange Santos

When starting a new journal, it is crucial to select a distinct and precise title that succinctly represents its scope, aims and focus, sets it apart from others in the field, and will stand the test of time.

The choice of a new journal's title should ideally link to its scope, aims and focus, by referencing the subject discipline of the journal (see <u>Scope, aims and focus</u>).

#### Deciding on a title

Before deciding on a title, it is vital to search the <u>ISSN Portal</u><sup>1</sup> (International Standard Serial Number International - the official journals registration organisation). Ideally, a journal's title should not be too similar to, or a repetition of, an existing title: this helps avoid confusion or an impression of deliberately trying to become associated with an established journal. Once the publishing entity has come up with a tentative title for the new journal, an internet search for the exact draft title being considered should be carried out to confirm that the chosen option is unique.

Publishers should aim to make journal titles distinctive and memorable, while still keeping them as brief as possible. Important keywords that help identify the journal's scope, aims or focus should be at the beginning of the title.

Once the journal title has been chosen, tested and checked, it should be registered via the <u>ISSN National Center</u><sup>2</sup> of the country where you wish to register the journal.

#### What to avoid

Although using acronyms may be useful for internal purposes, we recommend not including any in the title unless this is essential, for example to identify an official organisational publication.

Changing a journal title after publication has started is extremely inadvisable. The title should be carefully chosen so that it will keep its utility over time. Note that journals need to register for a new ISSN if the title or language are changed. It is best to avoid starting the title with "The International Journal of..." as this has unfortunately become widely associated with deceptive or fake journals (sometimes known as 'predatory' journals).

<sup>&</sup>lt;sup>1</sup> International Standard Serial Number International Centre, (n.d.) Find your way through the world of periodicals with the International Standard Serial Number. <u>https://portal.issn.org/</u>

<sup>&</sup>lt;sup>2</sup> International Standard Serial Number International Centre, (n.d.) The ISSN Network today. <u>https://www.issn.org/the-centre-and-the-network/members-countries/the-issn-network-today/</u>



## Types of content accepted

Topic leads: Andy Nobes, Katie Foxall, Clarissa F. D. Carneiro

Academic journals publish a range of different content types, which vary according to the scope and aims of the journal as well as its focus. The choice of appropriate content types helps maintain quality and ensure that the information published is methodologically sound, relevant to its audience and eligible for indexing.

Depending on their chosen scope, aims and focus, journals should choose an appropriate mix of content types to publish. It is important to note that journals often publish a mix of peer-reviewed and non-peer-reviewed contents, which have to be clearly labelled on journal pages to ensure readers are not misled (e.g. research vs opinion pieces).

The following tables outline the most common content types as well as discipline-specific outputs that a journal may consider.

Content type	Key features
Original research articles	<ul> <li>Original research findings typically based on data collected through experiments, surveys, interviews, observations or other forms of research methodologies</li> <li>Should have a clear hypothesis (or exploratory design if inductive research), methodology, results, and conclusion</li> </ul>
Review articles	<ul> <li>Overview of existing research on a particular topic and help to synthesise the existing body of research on a particular topic and provide a roadmap for future research</li> <li>May follow a <u>range of formats</u>,<sup>3</sup> such as narrative reviews, scoping reviews, and systematic reviews and meta-analyses</li> </ul>

#### Peer-reviewed content types

<sup>&</sup>lt;sup>3</sup> Bhandari, B. (2022, January 21). Writing a review article: Not a piece of cake. Author AID. <u>https://www.authoraid.info/en/news/details/1519/</u>



Content type	Key features
Case studies	<ul> <li>In-depth descriptions of real-life situations or events, used to demonstrate the application of a particular theory or concept in a specific context</li> <li>Typically describe a single case or a small series of cases and may not involve the same level of statistical analysis as other types of research</li> </ul>
Conference proceedings	<ul> <li>Collections of papers that have been presented at academic conferences</li> <li>Can be in the form of full-length research articles, as well as abstracts or summary papers</li> <li>May alternatively be published in collections called 'proceedings' rather than in a journal</li> <li>In some cases, they may not be peer-reviewed</li> </ul>

#### Non-peer-reviewed content types

Content type	Key features
Letters to the editor, commentaries and opinion pieces	<ul> <li>Short pieces of writing that express opinions or views on a specific topic</li> <li>Typically written in response to an article that has been published in the journal</li> <li>Provide a forum for authors and readers to engage in a dialogue and share perspectives on a particular issue</li> </ul>
Book reviews	<ul> <li>Critical evaluations of books that have been published in the field</li> <li>Provide readers with an overview of the content and arguments of the book, as well as an evaluation</li> </ul>



	of the book's strengths and weaknesses
Editorials	• Often written by the editor of the journal and provide a platform for the writer to express their opinions and views, or often to provide an introduction and commentary for that particular journal issue

#### Discipline-specific content types

Content type	Key features
Clinical trials	<ul> <li>Report the results of experiments that involve testing new treatments, drugs, or medical devices on human subjects</li> <li>Usually required to follow strict reporting guidelines, such as the CONSORT (<u>Consolidated</u> <u>Standards of Reporting Trials</u>) <u>statement</u>),<sup>4</sup> to ensure that the study design, methods, and results are transparent and replicable</li> </ul>
Protocol papers or methods papers	<ul> <li>Describe the methodology and design of a study before it is carried out, and may include details about the research question, hypothesis, study population, and statistical analysis plan</li> <li>Typically submitted to journals that focus on clinical research or methodology</li> </ul>
Technical reports	<ul> <li>Similar to protocol papers, but more common in engineering and computing</li> </ul>

<sup>&</sup>lt;sup>4</sup> Schulz,K. F., Altman, D. G. & Moher, D. (2010). Statement: updated guidelines for reporting parallel group randomised trials. Equator network. <u>https://www.equator-network.org/reporting-guidelines/consort/</u>



	<ul> <li>Provide a detailed description of the process and results of technical research or development</li> </ul>
Registered reports	<ul> <li>Describe a research question, hypothesis, and study design in advance, and undergo peer review before the study is carried out</li> <li>If the report is accepted, the researchers are guaranteed publication of the study results, regardless of the outcome</li> <li>Aim to reduce publication bias and promote transparency in scientific research</li> </ul>

#### Experimentation around content types

In principle, journals can publish an even broader range of outputs, including conceptual papers, policy briefs, data reports, discovery reports and tutorials. Some open access journals and megajournals take a radical approach and accept almost any output from the research cycle (e.g. <u>RIO\_Journal</u>).<sup>5</sup>

The types of content accepted in your journal should be displayed as part of author guidelines as well as the Aims & Scope page. If you are charging <u>article processing</u> <u>charges</u>, you will need to be clear which types of articles require payment and which do not. For example, book reviews, letters and other non-peer reviewed content would not normally be subject to an article processing charge.

<sup>&</sup>lt;sup>5</sup> Research Ideas and Outcomes. (n.d.). About. <u>https://riojournal.com/about</u>



## Kick-off and ongoing funding

Topic leads: Andrea Chiarelli, Rebecca Wojturska, Ivonne Lujano, Katie Foxall

Launching a publishing programme can be costly, depending on where this is hosted, how many articles are published and other factors. A mix of funding sources can help raise financing to start and subsequently run a journal, but not all options will be appropriate to individual titles. Journal managers need to choose carefully and ensure that their target authors and audience will support the funding mechanism(s) identified.

The open access movement involves publishing content so that it is available for anyone with an internet connection, without access barriers. However, as readers are not charged to access and read articles (unlike in the traditional subscription model), journals need to fund their activities through <u>alternative methods</u>.<sup>6</sup>

#### **Potential funding sources**

While <u>article processing charges</u><sup>7</sup> often dominate discussions around open access business models, there is a wide range of options that do not rely on these. Running a journal without article processing charges can promote equity and global representation in research: the (un)availability of funding to cover article processing charges causes severe imbalances across the world, with authors from low- and middle-income countries in particular often noting that publication budgets strongly affect their choice of publishing venue.

Where article processing charges are deemed to be necessary, journals should consider offering waivers to eligible countries, for example in alignment with the <u>guidance offered by Research4Life</u>.<sup>8</sup> However, it should be noted that article processing charges can cause a barrier for researchers in all countries if they are in a discipline or based at an institution that has limited funding available. In these cases, geography-based waivers will therefore not address imbalances in access to funding.

In the following table, we discuss some potential strategies for funding open access journals which do not impose financial burdens on authors. Please note that examples are provided for illustrative purposes only and are not endorsed or otherwise supported by the Toolkit.

<sup>&</sup>lt;sup>6</sup> Open access network. (n.d.). Business Models for Journals. <u>https://open-access.network/en/information/financing/business-models-for-journals</u>

<sup>&</sup>lt;sup>7</sup> ESAC. (n.d.). Market watch. <u>https://esac-initiative.org/market-watch/</u>

<sup>&</sup>lt;sup>8</sup> Research4Life. (n.d.). Best practice for APC waivers. <u>https://www.research4life.org/apc-waivers/</u>



Source of funding	Description	Examples
Institutional support	Universities, research institutions and learned societies can allocate funds to support the publication costs of open access journals. These funds will cover a chosen proportion of journal costs, potentially spanning from infrastructure only to all operations.	Open access journals by the Universidade Federal de Goiás <sup>9</sup> Open access journals by Universitas Indonesia <sup>10</sup> Open access journals in the SIRIO@UniTO platform <sup>11</sup>
Consortial funding and crowdfunding	Libraries and consortia can allocate a portion of their budgets to financially support open access journals. This approach allows for grassroots funding and promotes community engagement in advancing open access initiatives.	Annual Reviews (Subscribe to Open) <sup>12</sup> EMS Press (Subscribe to Open) <sup>13</sup> arXiv (consortia funding) <sup>14</sup> Open Library of Humanities (Library Partnership Subsidy model) <sup>15</sup>

<sup>&</sup>lt;sup>9</sup> Federal University of Goiás. (n.d.). UFG Journal Portal. <u>https://revistas.ufg.br/</u>

<sup>&</sup>lt;sup>10</sup> Universitas Indonesia. (n.d). UI Journals. <u>http://journal.ui.ac.id/</u>

<sup>&</sup>lt;sup>11</sup> Università di Torino. (n.d.). SIRIO@UniTO. <u>https://www.ojs.unito.it/</u>

 <sup>&</sup>lt;sup>12</sup> Annual reviews. (n.d.). Subscribe to Open. <u>https://www.annualreviews.org/page/subscriptions/subscribe-to-open</u>
 <sup>13</sup> EMS Press. (n.d.). Subscribe to Open. <u>https://ems.press/subscribe-to-open</u>
 <sup>14</sup> arXiv. (n.d.). Funding support. <u>https://info.arxiv.org/about/funding.html</u>

<sup>&</sup>lt;sup>15</sup> Open Library of Humanities. (n.d.). The OLH Model. <u>https://www.openlibhums.org/site/about/the-olh-model/</u>



Source of funding	Description	Examples
Sponsorship and partnership	Open access journals can seek partnerships and sponsorships with organisations and companies interested in supporting scientific research. Such partnerships can involve financial contributions, in-kind services or even collaborations to promote the journal and its content but care should be taken to ensure this does not compromise editorial independence.	<u>Small Business</u> <u>International Review</u> <sup>16</sup> Journal of Radiology and <u>Nuclear Medicine</u> (Вестник рентгенологии и радиологии) <sup>17</sup> <u>Tiempos Modernos</u> <sup>18</sup>
Freemium model	Under the freemium model, an open access journal or publisher may offer some services for free and others upon payment. For example, the html version of the article may be offered for free while the pdf and ePub version are only available upon payment. Similarly, online versions of the article may be available for free, while a physical copy is printed for a fee.	OpenEdition Freemium programme <sup>19</sup> Documenta Mathematica 20

<sup>&</sup>lt;sup>16</sup> Small business international review. (n.d). Small business international review. <u>https://sbir.upct.es/index.php/sbir</u>

<sup>&</sup>lt;sup>17</sup> Russian Radiology. (n.d.). Publisher and Sponsors. <u>https://www.russianradiology.ru/jour/about/journalSponsorship</u>

<sup>&</sup>lt;sup>18</sup> Tiempos Modernos. (n.d.). Magazine sponsors.

http://www.tiemposmodernos.org/tm3/index.php/tm/about/journalSponsorship

 <sup>&</sup>lt;sup>19</sup> Open Edition. (n.d.). The OpenEdition Freemium programme. <u>https://www.openedition.org/14043</u>
 <sup>20</sup> Webzine. (2003). Documenta Mathematica. <u>https://webzine.web.cern.ch/8/papers/3/index.html</u>



Source of funding	Description	Examples
National or philanthropic grants	Research funding organisations and foundations that prioritise open access and scientific advancement may provide financial support for journals. For example, this support may help cover operational costs or support a flip to open access.	Global justice: Theory, Practice, Rhetoric (funded by the German Research Foundation) <sup>21</sup> Access Microbiology (funding from Wellcome to flip to open access) <sup>22</sup>

Finally, we note the potential role of in-kind contributions and shared platforms. While not business models in their own right, these can help reduce the costs associated with publishing open access journals. There are a wide range of non-profit platforms offering hosting services, software development support and other technical resources at low or no cost, and in some cases grants and financial support may also be available (e.g. <u>Project Euclid</u>,<sup>23</sup> <u>Free Journal Network</u>).<sup>24</sup> Such contributions can alleviate the financial burden on journals and enhance their operational efficiency.

#### The role of voluntary labour

A study<sup>25</sup> commissioned by cOAlition S and funded by Science Europe sought to investigate the diamond open access landscape (see Glossary). Through a survey, they found that 60% of respondents (out of over 1,600 diamond open access journals) make use of volunteers; of these, 86% reported having a high or medium reliance on volunteers. The widespread use of voluntary labour means that a part of the total costs incurred by these journals remains invisible and is difficult to gauge. However, the above-mentioned study found that the journals that rely the most on volunteers are those using fewer paid staff (under 1 FTE) and operate on lower budgets (below \$/€10,000).

<sup>&</sup>lt;sup>21</sup> The global justice network. (n.d.). Global justice:Theory, Practice, Rhetoric. <u>https://www.theglobaljusticenetwork.org/index.php/gjn</u>

<sup>&</sup>lt;sup>22</sup> Microbiology society. (2022, May 30). MICROBIOLOGY SOCIETY LAUNCHES AN INNOVATIVE OPEN RESEARCH PLATFORM.

https://microbiologysociety.org/news/society-news/microbiology-society-launches-an-innovative-open-research-platfor m.html

<sup>&</sup>lt;sup>23</sup> Project Euclid. (n.d.). Project Euclid. <u>https://projecteuclid.org/</u>

<sup>&</sup>lt;sup>24</sup> Free Journals. (n.d.). Free Journals Network. <u>https://freejournals.org/</u>

<sup>&</sup>lt;sup>25</sup> Bosman, J., Frantsvåg, J. E., Kramer, B., Langlais, P.-C., & Proudman, V. (2021). OA Diamond Journals Study. Part 1: Findings. Zenodo. <u>https://doi.org/10.5281/ZENODO.4558704</u>



In addition to peer review and editorial board membership, volunteers are used across the whole publishing process with a core focus on editing, proofreading and copy-editing.

#### Making a choice for your journal

There is no sure-fire way to pick among the options described above, and even more may be available in future. Journals should critically assess the local and national landscapes, including public and philanthropic funding opportunities, as they make their first steps, to choose what option or mix of options appears most appropriate to their specific case.

The Toolkit section on the <u>costs of running an online open access journal</u> provides a starting point for journals to assess likely financing required, and we highlight that some reliance on voluntary labour will be necessary in many cases.



## **Disciplinary considerations**

Topic leads: Andrea Chiarelli, Andy Nobes

The adoption of open access varies by discipline, due to a mix of international, national, funder and institutional requirements, disciplinary expectations and individual behaviours. Journals catering to a specific discipline should ensure their offering mirrors the requirements and attitudes of their target communities.

Open access publishing continues to grow in popularity globally. However, <u>uptake</u> <u>varies across the spectrum of disciplines</u>.<sup>26</sup> The highest levels of open access are reported in the medical sciences, closely followed by natural and technical sciences: physics, mathematics, information technology and astronomy were early pioneers of open access, while uptake in biology increased in the early 2000s. The social sciences follow in terms of prevalence of open access publishing, with humanities, law, chemistry and engineering currently showing the lowest prevalence.

#### Understanding publishing trends across disciplines

The penetration of open access highly depends on author behaviours, attitudes and awareness; these vary by discipline but also based on one's location and affiliation. The following key considerations<sup>27</sup> can help explain variation in open access uptake across the board:

- National and funder policies strongly affect uptake: disciplines where policymakers have been actively promoting open access show higher rates of open access publishing (e.g. medical sciences).
- National and funder policies strongly affect the open access model that authors choose when publishing, with a clear preference for the gold open access model when article processing charges are eligible for support by research funders.
- In some disciplines, open access journals are sometimes associated with lower quality. This misconception has been shown to slow down the penetration of open access in disciplines such as chemistry, engineering and the social sciences. These barriers should be considered when seeking to launch or promote a journal in these areas.

New journals may also have to consider their disciplinary niche when it comes to forming an <u>editorial board</u>. The considerable growth in multidisciplinary journals and megajournals means that editorial boards should be sufficiently diverse to cover the range of subjects that authors may focus on.

<sup>&</sup>lt;sup>26</sup> Severin, A., Egger. M., Eve, M. P. & Hürlimann, D. (2020). Discipline-specific open access publishing practices and barriers to change: an evidence-based review. [version 2; peer review: 2 approved, 1 approved with reservations]. F1000Research, 7:1925. <u>https://doi.org/10.12688/f1000research.17328.2</u>

<sup>&</sup>lt;sup>27</sup> Severin, A., Egger. M., Eve, M. P. & Hürlimann, D. (2020). Discipline-specific open access publishing practices and barriers to change: an evidence-based review. [version 2; peer review: 2 approved, 1 approved with reservations]. F1000Research, 7:1925. <u>https://doi.org/10.12688/f1000research.17328.2</u>



#### Implications for author and peer reviewer guidelines

A new journal should not base its author guidelines on any existing examples or generic templates without considering the disciplinary differences of their field. Based on the discipline(s) served by a journal, it will be essential to ensure that guidelines for authors and peer reviewers cover appropriate reporting standards (e.g. <u>EQUATOR</u><sup>28</sup> – medical sciences, <u>ARRIVE</u><sup>29</sup> – animal research), reproducibility (e.g. <u>American Economic Association</u><sup>30</sup> – economics, <u>Executable Research Articles</u><sup>31</sup> – life sciences) and expectations around research ethics and integrity.<sup>32</sup> Additionally, journals may decide to require the deposit of specific research objects via data repositories at the time of submission or publication (including for peer review purposes). The research objects within the scope of a journal's policy will need to closely mirror disciplinary practices and may include for example research data and research code/software.<sup>33</sup>

Finally, preprint posting is common in physics, mathematics, astronomy, and information technology (e.g. <u>arXiv</u>)<sup>34</sup> and in the social sciences (e.g. <u>SSRN</u>).<sup>35</sup> Preprint posting has also been growing in popularity in biology (e.g. <u>bioRxiv</u>),<sup>36</sup> medical sciences (e.g. <u>medRxiv</u>)<sup>37</sup> and in chemistry (e.g. <u>ChemRxiv</u>).<sup>38</sup> Preprint posting should be covered by journals operating in disciplines where this is common, as part of <u>author guidelines</u>.

Ideally, the above observations on guidelines and preprint posting should also be reflected in the journal's submission system according to the target discipline(s), to ensure that relevant information can be captured early on in the process and can then be included as part of the article's metadata at the time of publication (including via Crossref).

<sup>&</sup>lt;sup>28</sup> Equator network. (n.d.). Reporting guidelines. <u>https://www.equator-network.org/reporting-guidelines/</u>

<sup>&</sup>lt;sup>29</sup> ARRIVE guidelines. (n.d.). About. <u>https://arriveguidelines.org/about</u>

<sup>&</sup>lt;sup>30</sup> American Economic Association. (n.d.). Policy and Protocol on Third-Party Verifications.

https://www.aeaweb.org/journals/data/policy-third-party

<sup>&</sup>lt;sup>31</sup> Atherden, F. (2021, June 29). Executable Research Articles. eLife.

https://elifesciences.org/collections/d72819a9/executable-research-articles

<sup>&</sup>lt;sup>32</sup> Strengthening research integrity: which topic areas should organisations focus on?. Humanities and social sciences communications, 8(198) <u>https://doi.org/10.1057/s41599-021-00874-y</u>

<sup>&</sup>lt;sup>33</sup> Jisc. (2021, July 26). Research data management toolkit. <u>https://www.jisc.ac.uk/guides/rdm-toolkit</u>

<sup>&</sup>lt;sup>34</sup> ArXiv. (n.d.). arXiv. <u>https://arxiv.org/</u>

<sup>&</sup>lt;sup>35</sup> SSRN. (n.d.). SSRN. <u>https://www.ssrn.com/</u>

<sup>&</sup>lt;sup>36</sup> BioRXiv. (n.d.). bioRxiv. <u>https://www.biorxiv.org/</u>

<sup>&</sup>lt;sup>37</sup> medRxiv. (n.d.). medRxiv. <u>https://www.medrxiv.org/</u>

<sup>&</sup>lt;sup>38</sup> ChemRxiv. (n.d.). ChemRxiv. <u>https://chemrxiv.org/engage/chemrxiv/public-dashboard</u>



## Journal setup checklist and timeline

Topic leads: Rebecca Wojturska, Solange Santos, Katie Foxall

There are many aspects to consider when starting a new journal. We have compiled a checklist to ensure that efforts can be targeted and are aligned with best practice and industry standards.

Launching a journal that meets industry standards as well as the needs of authors and readers takes more than just a website and content management system. This checklist should help new journals get started, and a downloadable version is available via Zenodo so you can easily track progress and set your own deadlines.

Each of the below bullets covers an aspect that new journals should consider as well as key information on it. Topics are linked to Toolkit pages so you can explore the discussion further, as appropriate.

- <u>Scope, aims and focus</u>: Clearly define what you wish to achieve with the journal, considering your target communities, geographic focus (if any) as well as potential policy and socioeconomic impacts.
- <u>Title</u>: Establish a name for the journal, and check the ISSN registry to ensure you don't pick a title that is already in use or too close to something existing. You want something catchy that encompasses the core subject areas that the journal will publish. As part of this, also consider a suitable abbreviation for the journal's name.
- <u>Editorial team & board</u>: Build an editorial team and a governance structure, including clear roles and responsibilities. Pick a board that can help raise the profile and reach of the journal.
- <u>ISSN</u>: Apply for a free ISSN pre- or post-launch via the ISSN national Center of the country where you want to register the journal. Internationally, you can use the ISSN Portal. An ISSN is a unique identifying code which is linked to your journal and its title. You will need one ISSN per format, so one for printed copies and one for digital copies. If you change your title at any point, you must request a new ISSN.
- <u>DOI registration agency</u>: Digital Object Identifiers (DOIs) are assigned to each content piece within a journal, as well as journal issues themselves. DOIs can be obtained from various agencies, with Crossref providing them for many publishers across the world.
- <u>Content types</u>: Decide what kind of content the journal should accept, and make a clear list that is aligned with disciplinary expectations.
- <u>Publication frequency and journal issues</u>: Decide whether to publish traditional issues or adopt a continuous publishing model. If you opt to group articles into issues, determine how often you want the journal to publish.



- Website: Find a website hosting platform that works for you. Pick a domain name so that the journal URL is straightforward and includes the journal title or acronym. Consider dedicated branding to help the journal stand out. Use the branding across the website and journal covers.
- <u>Editorial management system</u>: Decide how you will manage submissions and peer review, as well as the copyediting and typesetting processes. Open-source software, such as Open Journal Systems (OJS), is often used to publish Open Access journals.
- <u>Policies</u>: Get editorial policies and author guidelines in place before launch. Transparency is key, and policies should include information about the submission and peer-review process, a digital preservation policy, and a publication ethics statement.
- <u>Licence types</u>: Open Access articles are often assigned a Creative Commons Attribution (CC-BY) licence. Determine which licence(s) your journal will consider, and make this clear on the website so that authors are aware of the terms of publication.
- <u>Author agreements</u>: Decide if any extra terms and conditions need to be applied to publications; if so, draw an author agreement as appropriate. By using a CC-BY licence and having a clear open access policy in place, journals typically do not need a formal agreement for authors to sign.
- <u>Marketing & promotion</u>: Identify suitable marketing activities before launching the journal, targeting readers and authors alike. You may wish to consider conference presentation proposals, social media profiles, mailing lists and campaigns, blog posts and internal marketing (especially for library-based publishers).
- <u>Archiving & preservation</u>: Create a backup and preservation strategy. You may wish to look at external preservation service providers, such as <u>CLOCKSS</u>,<sup>39</sup> <u>LOCKSS</u>,<sup>40</sup> the <u>PKP Preservation Network</u><sup>41</sup> or <u>Project JASPER</u>.<sup>42</sup>
- <u>Indexing</u>: Once you have content, start submitting the journal for consideration by indexing databases. This helps increase exposure and discoverability. Only submit to databases that are relevant to the journal's subject area and always read the submission guidelines. Consider submitting to the <u>Directory of Open</u> <u>Access Journals (DOAI)</u>.<sup>43</sup>
- <u>Business models</u>: Consider how you may achieve operational and financial sustainability over time. It is common to have kick-off funding or to develop a journal through volunteering efforts, but these options will be less feasible the larger the journal gets.

<sup>&</sup>lt;sup>39</sup> CLOCKSS. (n.d.). CLOCKSS. <u>https://clockss.org/</u>

<sup>&</sup>lt;sup>40</sup> LOCKSS. (n.d.). Lots Of Copies Keep Stuff Safe. <u>https://www.lockss.org/</u>

<sup>&</sup>lt;sup>41</sup> Public Knowledge Project. (n.d.). PKP PRESERVATION NETWORK. <u>https://pkp.sfu.ca/pkp-pn/</u>

<sup>&</sup>lt;sup>42</sup> DOAJ. (n.d.). Project Jasper. <u>https://doaj.org/preservation/</u>

<sup>&</sup>lt;sup>43</sup> DOAJ. (n.d.). DOAJ. <u>https://doaj.org/</u>



## **Running a journal**

## Article selection criteria

Topic leads: Ivonne Lujano, Katie Foxall, Wendy Patterson

The selection criteria for submissions are determined by various factors including the discipline, accepted content types, and the available human, material and technological resources. The criteria should be explicit, easily findable, available in all languages of publication and preferably embedded in both the scope webpage and author guidelines.

One of the key responsibilities of editorial board members is to define article selection criteria. These criteria may change over time depending on the editors' research interests, social or cultural changes in the publishing landscape, emerging <u>guidelines</u><sup>44</sup> as well as new discoveries.

The journal should keep article selection criteria up to date and present them in plain language: clarity and transparency of presentation will help the editors deal with potential complaints, appeals and allegations.

#### Range of article selection criteria

The following table outlines common areas that should be included in a journal's article selection criteria. It should be noted that selection criteria apply to both peer-reviewed and non-peer-reviewed submissions, and key differences between these should be outlined clearly as part of the journal's guidance.

Criteria	Description
Fit with the journal's scope, aims and focus	<ul> <li>Extent to which the submission matches the stated journal's scope, aims and focus</li> <li>Key criterion considered at the desk review stage, likely to lead to a desk rejection if the fit is poor or not appropriate</li> </ul>
Fit with accepted content types	• Extent to which the submission matches the content types accepted by the journal

<sup>&</sup>lt;sup>44</sup> Heidari, S., Babor, T. F., De Castro, P., Tort, S., & Curno, M. (2016). Sex and Gender Equity in Research: Rationale for the SAGER guidelines and recommended use. Research Integrity and Peer Review, 1(1), 2. https://doi.org/10.1186/s41073-016-0007-6



Criteria	Description
	• Key criterion considered at the desk review stage, likely to lead to a desk rejection if the content type is not appropriate
Contribution to the field	<ul> <li>Extent to which the submission is considered to make a unique and original contribution to the field, on a theoretical, methodological, or empirical level</li> <li>May also consider novelty, with a negative impact on the acceptance rate of submissions that make a modest yet significant contribution</li> </ul>
Prior publication	<ul> <li>Requirement to only submit materials that are not under review in other journals, and that materials submitted have not been previously published (e.g. results, figures, and conclusions)</li> <li>Discussion of whether preprint posting is considered as prior publication by the journal</li> <li>Optional requirement to provide a preprint DOI or permalink for metadata linking if prior preprint posting is allowed</li> </ul>
Alignment with ethics expectations and integrity standards	<ul> <li>Extent to which the submission is in line with appropriate disciplinary standards, including both ethics and research integrity (e.g. research on humans and animals, confidentiality, privacy, management of sensitive data, copyright)</li> <li>Can be based on the <u>Ethics</u> <u>toolkit</u><sup>45</sup> provided by the</li> </ul>

<sup>&</sup>lt;sup>45</sup> COPE. (2022). Ethics toolkit for a successful editorial office. COPE: Committee on Publication Ethics. <u>https://publicationethics.org/resources/guidelines/ethics-toolkit-editors</u>



Criteria	Description
	<ul> <li>Committee on Publication Ethics (COPE)</li> <li>Key criterion considered at the desk review stage, likely to lead to a desk rejection in cases where obvious violations are spotted</li> <li>Key responsibility of peer reviewers if no obvious violations are spotted at the desk review stage</li> </ul>

#### Article selection process

Once a journal receives a submission, this is typically <u>reviewed by the editorial team</u>.<sup>46</sup> Initial checks might be delivered by less senior team members, if appropriate, including basic metadata entered via the submission system as well as the completeness of the submission (e.g. appropriate file format, submission of images and tables, submission of evidence of ethical approval). The submission is then handed over to an editor for a formal decision to <u>accept the submission for peer review</u> or to desk reject. When desk rejecting a submission, the editorial team may provide feedback to the author(s), potentially including a recommendation to resubmit after addressing gaps or misalignment with the journal's scope, aims and focus.

The management of research ethics is a crucial task for academic journals. Clear processes must be in place to identify and handle ethical concerns and these should be available on the journal's website. COPE recommends that journals develop guidelines for authors, reviewers, as well as procedures for editors to identify ethical concerns and respond to them appropriately. The management of research ethics starts at the article submission stage, but needs to be considered during peer review as well as after publication, in cases where <u>concerns are raised</u>.

<sup>&</sup>lt;sup>46</sup> BMJ author hub. (n.d.). The review process. <u>The review process - BMJ Author Hub</u>



## Publication frequency and journal issues

Topic leads: Tom Olijhoek, Ivonne Lujano, Rebecca Wojturska

It is good practice for journals to regularly publish new content. Several options are available, from limited frequency, such as annual or bi-annual, all the way through to continuous publication. Journals may have set deadlines for submission or include open calls that are not tied to a specific frequency.

Journals have to decide how frequently they wish to publish new submissions, as this will have an impact on workload, peer review management, IT costs and more. In the traditional publishing paradigm, where the print format was most common, it was typical for journals to publish issues as collections of peer-reviewed articles or other submissions, sometimes bundled in volumes. However, the introduction of digital publishing is shifting behaviours and introducing new models. In the following sections, we outline options for journals and the likely implications of different publication frequencies.

#### **Fixed frequency**

Conventional publishing often involves issues that can be bundled in volumes, which appear at pre-determined and regular intervals, and have fixed deadlines for the submission of manuscripts. If publishing under a fixed issue model, the journal may have a fixed number of articles and number of issues per year, and the issue publication dates may or may not be fixed. Articles submitted after submission deadlines may be immediately published online under an 'upcoming articles' section (or similar), and subsequently included as part of the next available issue.

#### **Continuous article publication**

Digital publishing allows the continuous publication of articles, meaning that these can be published as soon as they are ready (i.e. peer-reviewed, typeset and proofed) rather than waiting for a specific issue publication date. The rationale for a continuous article publication model is to speed up the pace of review and publication. Articles published under this model may be grouped in issues, but this is not mandatory. If this is the case, the latest published article would appear at the top of the issue, until the next article is accepted.

#### **Special issues**

Some digital publishers opt to commission special issues alongside their regular publishing efforts. Special issues typically focus on a specific topic or a conference and are managed by a guest editor and an editorial team not linked to the journal's editorial board. This allows the journal to gain a set of new perspectives that are closely tied to the subject matter of the special issue. The editorial process for special issues



should be of the same standard as the main content for the journal, with the Editor in Chief having ultimate oversight: this means that the guest editor and editorial team should collate and curate the contents, but the journal's own staff must quality assure and approve materials before these are.

#### Considerations for journal indexing

New journals often aim to be <u>indexed in relevant databases</u>, such as the <u>Directory of</u> <u>Open Access Journals (DOAJ)</u>,<sup>47</sup> <u>Web of Science</u><sup>48</sup> or <u>Scopus</u>.<sup>49</sup> A key requirement of these indexes is that journals are actively publishing, and, in some cases, there will be a minimum number of articles per year to be considered in the index. As a result, journals should ensure that their publication frequency and volume are set in line with any indexing objectives, to ensure that indexes do not reject an application on these grounds.

<sup>&</sup>lt;sup>47</sup> DOAJ. (n.d.). Guide to applying. <u>https://doaj.org/apply/guide/</u>

<sup>&</sup>lt;sup>48</sup> Clarivate. (n.d.). Web of Science Journal Evaluation Process and Selection Criteria.

https://clarivate.com/products/scientific-and-academic-research/research-discovery-and-workflow-solutions/web-of-science/core-collection/editorial-selection-process/editorial-selection-process/

<sup>&</sup>lt;sup>49</sup> Elsevier. (n.d.). Content Policy and Selection.

https://www.elsevier.com/solutions/scopus/how-scopus-works/content/content-policy-and-selection



## **Attracting authors**

Topic leads: Katie Foxall, Ivonne Lujano, Alex Mendonça

Making a journal appealing to authors is essential to attract submissions. It is important to drive author interest through building a positive reputation, providing effective author services and making sure that articles achieve as high an impact and reach as possible. These activities are also integral to retaining authors once they have published, to attract future submissions.

Attracting and retaining authors is a significant challenge for new and growing journals alike. This is key to maintaining a healthy pipeline of submissions and building the journal's success in the long term. As a starting point, journals should check the <u>Think.Check.Submit.</u><sup>50</sup> website to ensure that they meet all the criteria which mark out credible publications.

A mix of other strategies can help attract and retain authors, as illustrated below.

#### Indexing and memberships

Developing a good reputation is essential for any journal: being included in trustworthy indexes like <u>the Directory of Open Access Journals (DOAJ)</u>,<sup>51</sup> Web of Science<sup>52</sup> or <u>Scopus</u>,<sup>53</sup> and a member of industry organisations such as the <u>Committee on</u> <u>Publication Ethics</u><sup>54</sup> and the <u>Open Access Scholarly Publishing Association (OASPA)</u><sup>55</sup> can go some way towards signposting legitimacy. Some of these organisations offer reduced membership fees for underrepresented areas of the world. If relevant to the journal's focus and audience, inclusion in repositories such as <u>PubMed Central</u>,<sup>56</sup> <u>arXiv</u><sup>57</sup> and <u>Humanities Commons</u><sup>58</sup> is also valued by authors.

#### **Building and managing relationships**

It is important to build relationships within the target research community, and to create a sense of community around the journal. <u>Recruiting highly engaged editorial</u> <u>board members</u> who are well known in their fields is a way to achieve this. These board

<sup>&</sup>lt;sup>50</sup> Think Check Submit. (n.d.). Journals. <u>https://thinkchecksubmit.org/journals/</u>

<sup>&</sup>lt;sup>51</sup> DOAJ. (n.d.). DOAJ. <u>https://doaj.org/</u>

<sup>&</sup>lt;sup>52</sup> Clarivate. (n.d.). Web of Science core collection: Editorial selection process.

https://clarivate.com/products/scientific-and-academic-research/research-discovery-and-workflow-solutions/web-of-science/core-collection/editorial-selection-process/

<sup>&</sup>lt;sup>53</sup> Elsevier. (n.d.). Scopus Content Selection and Advisory Board. https://www.elsevier.com/solutions/scopus/how-scopus-works/content/scopus-content-selection-and-advisory-board

<sup>&</sup>lt;sup>54</sup> COPE. (n.d.). Committee on Publication Ethics. <u>https://publicationethics.org/</u>

<sup>&</sup>lt;sup>55</sup> OASPA. (n.d.). Home. <u>https://oaspa.org/</u>

<sup>&</sup>lt;sup>56</sup> PubMed Central. (n.d.). PMC FAQs. National Library of Medicine. <u>https://www.ncbi.nlm.nih.gov/pmc/about/faq/</u>

<sup>&</sup>lt;sup>57</sup> ArXiv. (n.d.). arXiv. <u>https://arxiv.org/</u>

<sup>&</sup>lt;sup>58</sup> Humanities commons. (n.d.). Humanities Commons. <u>https://hcommons.org/</u>



members can act as ambassadors for the journal, recommending it to their networks as a good publication option.

Commissioning review articles and special issues on topics of interest in the field, which are more likely to attract a wide readership and a large number of citations, is another strategy to engage and build community.

#### **Author services**

Providing an excellent publication experience from start to finish ensures that previous authors submit again and recommend the journal to their peers. It is important to make it as easy as possible to submit an article, with clear author guidelines and editorial policies as well as an up-to-date website that is easy to navigate. Furthermore, a rigorous peer review process is not only helpful to authors for improving their work, but ensures that only high quality articles are published, making the journal more attractive to prospective authors. The process must also be timely and efficient, with effective author communication at all times. Quick turnaround times are often among the most valued journal attributes for authors.

If the journal has <u>article processing charges</u>, these must be appropriate to the author's circumstances, e.g. based on geographic region and subject field. Journals should offer article processing charge waivers where appropriate, and this information should be easy to locate and understand on the journal's website.

#### Marketing and promotion

Drawing attention to a journal can be achieved via regular posting on social media outlets, press releases and outreach on scholarly social networking platforms (see Building and maintaining a profile). Creating a blog or news area to post journal announcements and highlights is a good way to communicate with potential authors, and guest blogs can be solicited to help generate content and attention. This approach, however, depends on resources and the mix of skills available to the journal and may not be viable in all cases.

More targeted promotion such as advertising the journal at conferences, sending out tables of contents to relevant audiences or through university departments that have a research focus in the relevant subject area can also help to attract new authors. Mass solicitation or "spamming" of potential authors should be avoided in all cases.



## Peer review and quality assurance

Topic leads: Clarissa F. D. Carneiro, Elle Malcolmson, Alex Mendonça

Peer review has been applied by journals for centuries, but formats vary widely. It is considered the best system available for assessing the quality of manuscripts submitted for publication, although it has limitations. A key challenge for journals is to identify available peer-reviewers, including because the number of articles published globally is increasing at a fast pace.

Today, peer review is considered an indispensable requirement for formal publication. As a result, journals need to establish appropriate peer review policies as well as approaches to recruit peer reviewers.

Peer review aims to assess the suitability of a submission for publication. It is delivered by experts in the field of the submission, who must be identified by editorial staff. Different journals and editors have different expectations around the <u>role of</u> <u>reviewers</u>, <sup>59</sup> so clear guidance is essential. Notably, authors tend to prefer rapid peer review, as this means that their work is published quickly. However, time pressure on peer reviewers may compromise the quality of their input. As a result, journals have a responsibility to keep speed and quality of peer review in balance, to ensure that published articles are of high standard.

Whether a submission is deemed to be suitable for publication depends on the journal's <u>article selection criteria</u> as well as on the quality and integrity of the research being described. For example, peer reviewers may be asked to focus on methodological rigour, novelty, engagement with open scholarship practices or any other criteria set by editorial staff.

#### Approaches to peer review

Peer review can be delivered in a broad range of ways, all of which have their respective merits. It is the editorial board's responsibility to choose a suitable approach, considering the following dimensions:

Dimension	Key considerations
Number of reviewers	<ul> <li>Multiple reviewers are preferable (at least two per submission are highly recommended), as</li> </ul>

<sup>&</sup>lt;sup>59</sup> Song, E., Ang, L., Park, J.-Y., Jun, E.-Y., Kim, K. H., Jun, J., Park, S., & Lee, M. S. (2021). A scoping review on biomedical journal peer review guides for reviewers. PLOS ONE, 16(5), e0251440. <u>https://doi.org/10.1371/journal.pone.0251440</u>.



Dimension	Key considerations
	consensus between them is typically <u>limited</u> <sup>60</sup> • Recruiting multiple reviewers may be <u>difficult</u> <sup>61</sup>
Interaction between reviewers	<ul> <li>Consensus from reviewers can more easily help authors improve their submission</li> <li>Collaborative comments by reviewers can help editors make decisions</li> </ul>
Identification of authors and reviewers	<ul> <li>Multiple variations are possible, including single- (names of reviewers hidden from the author; name of the author shared with reviewers), double- (no names shared with either authors or reviewers) and triple-anonymous peer review (no names shared with either authors or reviewers, plus the editor remains anonymous, too)</li> <li>Identification may lead to biased<sup>62</sup> comments, which can be mitigated via levels of anonymity in peer review</li> <li>Identification may be partly inevitable if a preprint version has been posted (i.e. authors can be identified by default)</li> </ul>
Publication of peer review reports (also known as transparent or open peer review)	• Improves transparency and allows research on peer review itself, with the goal of continuously improving the system

<sup>&</sup>lt;sup>60</sup> Bornmann, L., Mutz, R., & Daniel, H.-D. (2010). A Reliability-Generalization Study of Journal Peer Reviews: A Multilevel Meta-Analysis of Inter-Rater Reliability and Its Determinants. PLoS ONE, 5(12), e14331. https://doi.org/10.1371/journal.pone.0014331

<sup>&</sup>lt;sup>61</sup> Dance, A. (2023). Stop the peer-review treadmill. I want to get off. (Nature 614, 581-583). Nature. <u>https://doi.org/10.1038/d41586-023-00403-8</u>

<sup>&</sup>lt;sup>62</sup> Huber, J., Inoua, S., Kerschbamer, R., König-Kersting, C., Palan, S., & Smith, V. L. (2022). Nobel and novice: Author prominence affects peer review. Proceedings of the National Academy of Sciences, 119(41), e2205779119. https://doi.org/10.1073/pnas.2205779119



Dimension	Key considerations
	<ul> <li>May discourage some authors and reviewers from submitting</li> </ul>

The use of <u>automated review tools</u><sup>63</sup> is also possible, although journals should note that these are only able to detect basic issues (e.g. plagiarism, data sharing statements, reagent identifiers). By using artificial intelligence, these tools can help reduce the editors' and reviewers' workload, although ongoing research has highlighted potential concerns around computational bias. As a result, automated review tools should not be used to automatically make decisions on submissions received, but only to inform the peer review process.

#### How to choose peer reviewers?

Identifying reviewers is a complex challenge, as researchers are typically very busy and the number of articles that need reviewing annually grows more quickly than the pool of available reviewers. The following <u>strategies</u><sup>64</sup> may help in identifying peer reviewers:

- Asking authors to provide suggestions
- Checking the references in the submission or automated tools to identify researchers in similar areas
- Using personal networks, including from editors, the editorial boards and previous authors and guest editors
- Inviting previous peer-reviewers
- Asking declining peer-reviewers to provide suggestions for alternative candidates

Today, there are imbalances in peer review, which contribute to difficulties in finding reviewers and to the overburdening of a small sample of reviewers (<u>Kovanis et al.</u>, <u>2016</u>).<sup>65</sup> In addition, diversifying reviewers in terms of gender, region or other personal characteristics can have a positive impact (<u>Murray et al.</u>, 2019).<sup>66</sup>

#### Limitations of peer review

Currently, there is no reliable evidence that peer review significantly contributes to the overall quality of scientific literature. This lack of evidence, however, does not indicate

- https://blogs.lse.ac.uk/impactofsocialsciences/2021/05/17/can-ai-be-used-ethically-to-assist-peer-review/
- <sup>64</sup> Editor resources Taylor and Francis. (n.d.). How to find peer reviewers an editor's guide.

<sup>&</sup>lt;sup>63</sup> Checco, A., Bracciale, L., Loreti, P., Pinfield, S., & Bianchimani, G. (2021). Can AI be used ethically to assist peer review?. Impact of Social Sciences Blog.

https://editorresources.taylorandfrancis.com/managing-peer-review-process/how-to-find-peer-reviewers-an-editors-gui

<sup>&</sup>lt;sup>65</sup> Kovanis, M., Porcher, R., Ravaud, P., & Trinquart, L. (2016). The Global Burden of Journal Peer Review in the Biomedical Literature: Strong Imbalance in the Collective Enterprise. PLOS ONE, 11(11), e0166387. https://doi.org/10.1371/journal.pone.0166387

<sup>&</sup>lt;sup>66</sup> Murray, D., Siler, K., Larivière, V., Chan, W. M., Collings, A. M., Raymond, J., & Sugimoto, C. R. (2018). Author-Reviewer Homophily in Peer Review. BioRxiv, 400515.<u>https://doi.org/10.1101/400515</u>



that peer review is harmful or should be avoided, but just points to the need for more research about established and innovative peer review systems.

Important concerns about peer review include the low agreement between reviewers, the fact that they are subjected to biases and that peer review can be very time consuming.

Finally, peer reviewers can only address the quality of a manuscript - not of the underlying research. Other methods of quality assurance, such as assessing reproducibility or replicability, are being considered by some journals alongside peer review (e.g. <u>American Economic Association</u>),<sup>67</sup> although this remains a limited practice. The requirement for a data availability statement and data sharing as part of <u>editorial</u> <u>policies</u> is a useful way to enable activities such as reproducibility or replicability checks.

#### Manipulation of the publication process

The Committee on Publication ethics defines '<u>paper mills</u><sup>68</sup> as individuals, groups or organisations that aim to manipulate the publication process for financial gain. These actors pursue the fraudulent submission, peer review and publication of articles that are, in most cases, incorrect and not arising from genuine research endeavours. Identifying paper mill activity is complex, as these articles are designed to deceive all stakeholders involved in the publication process as well as readers. Often, fraudulent articles are only spotted after they are published, as concerns across several articles may start appearing as a coherent pattern. In these cases, editors should collect information, documentation and data from authors to inform next steps.

<u>Dealing with paper mills</u><sup>69</sup> creates a significant administrative burden. Journals are therefore advised to have clear guidance and processes in place, as well as to operate transparently and share information with other publishers (and, potentially, the author's institution) as appropriate. Any <u>retraction notices</u> applied to articles identified as arising from a paper mill should be transparent and clear, too. Throughout the process of investigating paper mill activity, journals and editors should respect confidentiality, as there is a high risk of unwillingly damaging an author's reputation even when claims or concerns may eventually be resolved or unfunded.

<sup>&</sup>lt;sup>67</sup> Office of the American Economic Association Data Editor. (n.d.). <u>https://aeadataeditor.github.io/</u>

<sup>&</sup>lt;sup>68</sup> COPE Council. (2019). COPE Supplemental guidance — Addressing concerns about systematic manipulation of the publication process — English. <u>https://doi.org/10.24318/x0mN3xfd</u>

<sup>&</sup>lt;sup>69</sup> COPE. (n.d.). Webinar 2022: Managing paper mills. Committee on Publication Ethics. <u>https://publicationethics.org/resources/seminars-and-webinars/managing-paper-mills</u>



## The costs of running an online open access journal

Topic leads: Andrea Chiarelli, Susan Murray, Ivonne Lujano

Online open access journals may have to cover a range of costs, for example web hosting, a domain name, DOI registration, plagiarism checks and, potentially, staff and facilities. Journals also need to think about recurring yet infrequent activities, such as updating their platform and technical infrastructure every few years. Finally, one-off costs such as branding and promotion may be incurred in some cases.

Running an open access online journal is not dissimilar from running a business. Broadly speaking, the journal's manager or owner will need to consider a mix of fixed and variable costs. The former mainly arise from the social and technical infrastructure required to run the journal, while the latter are related with the number of articles that are published. To complicate matters, other costs will apply occasionally, for example a need to renew or update the journal's technical infrastructure or ad-hoc marketing activities.

#### **Fixed costs**

<u>Salaried staff</u> tends to be one of the highest costs incurred by journals. Similarly, estates tend to highly affect monthly bills, including costs such as offices, internet connections, telephones and more. Staff and facilities are not a concern if a journal is run by volunteers using space and services that have a different primary use: for example, this is the case if a journal is run by an academic using their university device(s) and office. However, these costs should not be ignored, as a change in the journal manager's circumstances and affiliation may swiftly affect the journal.

Some information technology (IT) costs must be covered by virtually any journal, such as web hosting, domain registration, website maintenance and the submission management system (unless this is open source, although its maintenance should always be accounted for). Additionally, journals are likely to have to cover several membership costs, including <u>Crossref</u><sup>70</sup> as a starting point. Other memberships or annual service fees may also apply, such as <u>iThenticate</u><sup>71</sup> (plagiarism), <u>CLOCKSS</u><sup>72</sup> (preservation), <u>COPE</u><sup>73</sup> (publication ethics) or <u>COUNTER</u><sup>74</sup> (article statistics).

Although it is difficult to provide estimates that apply across geographic regions, costs beyond staff and facilities are likely to add up to a few thousand dollars at most. There comes a point, however, where the number of submissions exceeds the amount of

<sup>&</sup>lt;sup>70</sup> Crossref. (2021, May 10). Become a member. <u>https://www.crossref.org/membership/</u>

<sup>&</sup>lt;sup>71</sup> Crossref. (2020, April 08). Similarity Check. <u>https://www.crossref.org/services/similarity-check/</u>

<sup>&</sup>lt;sup>72</sup> CLOCKSS. (n.d.). JOIN THE CLOCKSS COMMUNITY OF WORLD LEADING LIBRARIES AND PUBLISHERS. https://clockss.org/join-clockss/

<sup>&</sup>lt;sup>73</sup> COPE. (n.d.). Become a member. <u>https://publicationethics.org/become-member</u>

<sup>&</sup>lt;sup>74</sup> COUNTER. (n.d.). Become a COUNTER Member. <u>https://www.projectcounter.org/become-member/</u>



work that a small group of committed volunteers can shoulder, leading to the potential need to hire dedicated staff. Should a journal reach this size, sources of income to cover fixed costs will become increasingly important.

#### Variable costs

Journals are responsible for peer-reviewing and publishing articles online. These activities require, once again, social and technical infrastructure. The social infrastructure is provided in the form of a peer review manager (salaried or volunteer) plus individual peer reviewers, who are usually unpaid. The technical infrastructure typically consists in the costs to register a DOI for the article and production (often in XML and PDF), plus, optionally, plagiarism checks.

Importantly, while fixed costs scale up linearly (e.g. two salaried staff members may cost twice as much as one salaried staff member), costs per article decrease based on the number of submissions, as long as the articles can be processed by existing staff and infrastructure.

#### **Other costs**

Journals can incur ad-hoc costs, for example for marketing and promotion (e.g. a travel or conference budget). In some cases, journals may opt to offer services that are relevant to their target disciplines, such as reproducibility checks or the hosting of live code (e.g. <u>executable research articles</u>).<sup>75</sup> Whenever a specific and non-standard feature is considered by a journal, its cost should be included in the appropriate category, depending on its nature: for example, reproducibility checks (e.g. <u>cascad</u>)<sup>76</sup> are likely to be variable costs (i.e. cost per article), while custom IT infrastructure to run code or visualisations on the journal's platform may be a fixed cost (e.g. additional storage, compute time). Finally, some journals still print out their issues, usually on-demand and in small amounts. Such costs may be charged to the reader, but some journals opt to cover them from their own budget.

#### Making ends meet

There are several ways of raising funds to run small journals, including from organisations relevant to the journal's scope (e.g. professional bodies, sector associations), from research performing organisations or via donations. Alternatively, some journals may opt to raise <u>article processing charges</u> to cover their costs.

Clearly, the circumstances of the journal manager, their affiliation and location, the discipline(s) that the journal wishes to serve and any specific technical requirements will highly affect a journal's costs and one's ability to cover them. Although there is no

 <sup>&</sup>lt;sup>75</sup> Atherden, F. (2021, June 29). Executable Research Articles. eLife.
 <u>https://elifesciences.org/collections/d72819a9/executable-research-articles</u>
 <sup>76</sup> Cascad. (n.d.). cascad. https://www.cascad.tech



one-size-fits-all solution to funding online open access journals, being aware of cost types and likely amounts is key to enhancing the chances of success of new and established titles.



## Running a journal in a local or regional language

Topic leads: Ivonne Lujano

Academic journals may be published in any language. It is paramount to have human resources and digital infrastructures that help the readers, the authors, and the reviewers read and engage with the journal's contents regardless of the language of publication.

The <u>Directory of Open Access Journals (DOAJ</u>)<sup>77</sup> records tens of languages of publication, reflecting journals that publish in a single or multiple languages, up to <u>30</u> <u>different languages</u><sup>78</sup> in the same title. Some journals may use different languages for different purposes: for example, the website may be available in English, to communicate with the international community, but the full-text contents may be available in the country's local or regional language. This landscape speaks of a desire to reach <u>balanced multilingualism</u>,<sup>79</sup> despite the global predominance of English in scholarly communications.

In any event, if the journal is available in multiple languages, <u>the information provided</u> <u>must be the same in all languages</u>:<sup>80</sup> this helps avoid ambiguity and ensures that all authors and readers abide by a consistent set of expectations.

#### Why communicate research in local languages?

It can be helpful to run journals in local languages (either in addition to English, or only in another language) for various reasons:

- Science needs to communicate with society. Besides researchers being the main target of journals, other stakeholders also benefit from publications, such as students, practitioners, policymakers, journalists and the general public. Importantly, some of these stakeholders only speak or can read their local language. Publishing in languages shared by various communities at a national or regional level can help strengthen collaboration and policy impact.
- Each language expresses ways of conceiving the world and knowledge. Therefore, encouraging scholarly publication in the language of the authors and readers strengthens the development of theories, methodologies and general scientific thought among that community of speakers.

#### Implications of the journal's language

The decision of what language(s) a journal will adopt depends on many factors, such as the discipline, the intended audience, the socio-historical context of the country, the

<sup>77</sup> DOAJ. (n.d.). DOAJ. https://doaj.org/

<sup>&</sup>lt;sup>78</sup> Science in school. (n.d.). Homepage. <u>https://www.scienceinschool.org/</u>

 <sup>&</sup>lt;sup>79</sup> Sivertsen, G. (2018). Balanced multilingualism in research. In L'évaluation de la recherche scientifique: Enjeux, méthodes et instruments, Actes de la colloque International (pp. 88-102). <u>https://doi.org/10.1344/BiD2018.40.25</u>
 <sup>80</sup> DOAJ. (n.d.). Guide to applying. <u>https://doaj.org/apply/guide/</u>



available budget and more. This decision is usually made by the publisher alongside the editorial team. Some decision points to consider when publishing in languages other than English include the following:

Area	Decision points
Audience	• Is the journal intended to reach an international audience, or does it focus mainly on the domestic population? Does it target both?
Editorial board	<ul> <li>Are individuals who speak the language(s) of publication available to join the editorial board?</li> <li>Is it necessary/desirable to establish groups of editors focusing on different languages?</li> </ul>
Peer review	<ul> <li>Are individuals who speak the language(s) of publication available to peer-review submissions?</li> <li>Are copy editors available to review the quality of the languages(s) of publication?</li> </ul>
Website	<ul> <li>Is it desirable to install automated translation packages on the journal's website, to enhance accessibility for viewers who speak different languages?</li> <li>Would it be appropriate to professionally translate the journal's website?</li> </ul>

In any event, it is recommended that journals also publish titles and abstracts in English, so that the international community can understand the journal's scope, aims and focus and access any materials that may be of interest (including, for example, research data associated with the article).



## Flipping a journal to open access

Topic leads: Susan Murray, Rebecca Wojturska, Tom Olijhoek

*"Flipping" a journal means changing its publishing model from one which charges readers for access to articles to an open access publishing model that uses open licences. Flipping a journal is typically complex, as it requires change management and a revision of the existing business model.* 

In the context of today's global push towards open science, subscription-based journals may contemplate the question: "Should we flip to open access?" The term 'flipping' denotes converting one or more paywalled titles to an open access publishing model, which implies a shift in business models and the approach to licensing. Most often, flipping a journal means that all articles published in future will be accessible via the gold or diamond open access routes, using Creative Commons licences (see <u>Glossary</u>).

#### Planning for a flip

A journal's ability to flip to open access is contingent on support from all publishing stakeholders. In the process of flipping a journal, the following questions should be <u>considered</u>:<sup>81</sup>

- What is the goal of transitioning the journal to open access?
- Who owns the rights to the journal, and are they supportive of such a transition?
- Who are the key stakeholders that must be consulted about such a transition?
- How can the current business model be tapered off for authors and subscribers?
- If an article processing charge model is to be adopted, what is the appropriate price point to sustain journal operations?
- How can a print program (if one exists) be maintained after the transition?

If working with a publishing partner, should the publisher have no interest in adopting an open access model, options include undertaking the flip independently or partnering with a new organisation, such as a mission-driven university press open to working with or launching open access titles. If the journal is being managed independently, decision-making is likely to be easier.

Note that starting a new open access journal may be the only option available if working with a corporate publishing partner, as these often require journals to transfer ownership rights.

#### **Financial considerations**

<sup>&</sup>lt;sup>81</sup> Sparcopen. (n.d.).*Transitioning Your Journal from Subscription to Open Access*. <u>https://sparcopen.org/our-work/transitioning-your-journal/</u>



Naturally, financial concerns tend to dominate discussions about switching subscription titles to open access. Scholarly societies and university presses reliant on subscription revenue may need to assess different open access funding options and potentially explore alternative income sources for a sustainable transition. In some instances, starting a new journal may be a more feasible entry point to open access, particularly if more complex funding mechanisms have to be set up and operationalised. This process may sound daunting, but it is important to acknowledge that several approaches have been devised to make the transition as smooth as possible.

From the point of view of openness and access for both submitting authors and readers, a <u>flip to a diamond model</u><sup>82</sup> is ideal. This can be pursued in cases where <u>external funding</u> is available, for example via an institution, sector organisation or funder. In other cases, journals may consider the introduction of article processing charges (gold open access model), which can be paid by individual authors, by their institutions or via grants from some research funders. This is less accessible to submitting authors in certain regions of the world, unless waivers are available as appropriate.

Another model that is currently being experimented with is called <u>Subscribe to Open</u>:<sup>83</sup> this allows publishers to convert journals to open access one year at a time, and content published is made available via open access if subscribers continue to renew their subscription.

Finally, we note that mechanisms such as <u>Transformative journals</u><sup>84</sup> and <u>Transitional</u> <u>agreements</u><sup>85</sup> have been introduced to support the transition of subscription or hybrid journals towards open access. These mechanisms are however seen as a temporary tool and, in time, will receive less support from research funders.

<sup>&</sup>lt;sup>82</sup> The MIT Press. (2023, February 02). The MIT Press announces new initiative to flip existing subscription-based journals to a diamond open access publishing model.

https://mitpress.mit.edu/the-mit-press-announces-new-initiative-to-flip-existing-subscription-based-journals-to-a-diamo nd-open-access-publishing-model/

<sup>&</sup>lt;sup>83</sup> Subscribe to open. (n.d.). About. <u>https://subscribetoopencommunity.org/</u>

<sup>&</sup>lt;sup>84</sup> cOAlition S. (n.d.). Transformative Journals.

https://www.coalition-s.org/addendum-to-the-coalition-s-guidance-on-the-implementation-of-plan-s/ <sup>85</sup> Jisc. (n.d.). Working with transitional agreements.

https://www.jisc.ac.uk/full-guide/working-with-transitional-agreements





### Building and maintaining a profile

Topic leads: Andy Nobes, Andy Byers

Open access journals face unique challenges, but also opportunities, in building their profile compared to traditional subscription-based journals. Strategies include building community, partnerships and credibility, including via the use of social media and attendance at conferences and events to engage new and existing audiences.

Academic journals need to build and manage their profile in order to attract submissions from reputable researchers as well as to appear credible to readers. Having a strong profile helps academic journals establish authority in their field, which can lead to increased readership and impact. An effective profile can help journals differentiate themselves from competitors, highlighting their strengths and unique attributes.

Journal websites are often used by researchers and institutions as a proxy for the quality and impact of the research published, so it is important for journals to present a professional and accurate image. Building and managing a strong profile can also help academic journals engage with their audience and foster a sense of community within their field.

#### The value of credibility and transparency

Ensuring the credibility and transparency of a journal is key. As a starting point, this can be signalled via good web design as well as by establishing transparent and informative communications channels that genuinely help authors and readers.

First and foremost, the journal's website should ideally be designed by a professional or by using templates in line with best practice web design principles. On the website, policies, guidelines and contact information should be signposted clearly. Spelling errors and broken links on the homepage should be avoided at all costs, as they are sometimes considered as a sign of a possible predatory or illegitimate journal.

Furthermore, seeing that a journal is indexed in appropriate databases is often used by visitors to assess credibility, and this topic is further explored in the <u>dedicated Toolkit</u> <u>section</u>. Assembling a <u>diverse team of respected researchers and scholars to serve on</u> <u>the editorial board</u><sup>86</sup> can also strengthen credibility and profile, especially if board members have strong links with their communities.

<sup>&</sup>lt;sup>86</sup> Springer nature. (n.d). Build a strong editorial board. <u>https://www.springernature.com/gp/editors/resources-tools/editorial-boards</u>



Finally, journals should use external communications wisely. Mailing lists can be useful to keep readers up to date, but journals should ensure that they do not send unsolicited emails and that any emails comply with relevant privacy policies (e.g. the <u>EU's GDPR</u>).<sup>87</sup>

#### The role of social media

Journals should investigate what platform(s) their target audiences tend to use and then establish a presence as appropriate. <u>Twitter is one of the most used platforms by</u> <u>academics</u>,<sup>88</sup> while LinkedIn and Facebook are helpful to engage with professionals and the public, respectively.

When using social media, journals should devise a strategy and create engaging content that is relevant to their audiences, using targeted hashtags. This is not always easy, and it may be beneficial to work with communications experts or a social media manager to develop sustainable approaches to social media marketing. A mix of article highlights, blog posts, infographics and videos is likely to be most effective, but journals should consider what feels appropriate to their mix of skills and funding available.

Interaction with followers is also important to create a sense of community, so journals using social media should endeavour to reply to comments and create opportunities for discussion. Linking appropriate research articles with <u>notable days</u><sup>89</sup> (e.g. Earth day, World Oceans Day) can be helpful to drive attention to the journal.

#### **Ongoing monitoring**

A journal's public profile has to be managed proactively, and measuring results is a core part of this. Tracking web engagement metrics such as downloads, followers, engagement rates, and referrals from social media can help assess the impact of communication and engagement strategies and make adjustments as needed.

To achieve the above in practice, the use of analytics code is common (e.g. <u>Google</u> <u>Analytics</u>,<sup>90</sup> <u>Plausible</u>,<sup>91</sup> <u>Matomo</u>),<sup>92</sup> both for the whole journal website and individual articles. The use of bibliometric measures as well as <u>altmetrics</u><sup>93</sup> (e.g. <u>Altmetric</u>,<sup>94</sup> <u>Plum</u>

https://blogs.lse.ac.uk/impactofsocialsciences/2017/12/04/academic-journals-with-a-presence-on-twitter-are-more-widel y-disseminated-and-receive-a-higher-number-of-citations/

<sup>&</sup>lt;sup>87</sup> GDPR. (n.d.). How does the GDPR affect email? <u>https://gdpr.eu/email-encryption/</u>

<sup>&</sup>lt;sup>88</sup> Ortega, J. L. (2017, December 04). Academic journals with a presence on Twitter are more widely disseminated and receive a higher number of citations. LSE blog.

<sup>&</sup>lt;sup>89</sup> Business Twitter. (2023). 2023 Twitter Marketing Calendar. https://business.twitter.com/en/resources/twitter-marketing-calendar.html

<sup>&</sup>lt;sup>90</sup> Google Analytics. (n.d.). Google analytics. <u>https://analytics.google.com/</u>

<sup>&</sup>lt;sup>91</sup> Plausible. (n.d.). Plausible analytics. <u>https://plausible.io/docs/plausible-script</u>

<sup>92</sup> Matomo. (n.d.). Matomo Analytics. https://matomo.org/

<sup>&</sup>lt;sup>93</sup> Wikipedia. (2023, April 28). Altmetrics. <u>https://en.wikipedia.org/wiki/Altmetrics</u>

<sup>&</sup>lt;sup>94</sup> Altmetrics. (n.d.). Publishers. <u>https://www.altmetric.com/our-audience/publishers/</u>



<u>Analytics</u>,<sup>95</sup> <u>Crossref's Event Data</u>)<sup>96</sup> is also used as a proxy to estimate the success of individual publications as well as the journal as a whole (see <u>Journal and article</u> <u>indexing</u>).

<sup>&</sup>lt;sup>95</sup> Plum Analytics. (n.d.). Plum Analytics. <u>https://plumanalytics.com/</u>

<sup>&</sup>lt;sup>96</sup> CrossRef. (n.d.). Event data. <u>https://www.crossref.org/services/event-data/</u>



### Journal and article indexing

Topic leads: Katie Foxall, Andy Nobes, Ivonne Lujano

Indexing plays a crucial role in enhancing the discoverability of articles, and inclusion in relevant indexes often acts as a proxy for a journal's quality. A journal index is a collection of journal titles, categorised by discipline, subject, publication type, or other features. An ISSN (International Standard Serial Number) serves as a distinctive identifier for publications, distinguishing all ongoing resources, regardless of their format (print or electronic).

When journals are started, registering for an ISSN (International Standard Serial Number) is one of the first steps. An ISSN is a persistent identifier for each title and can be obtained free of charge from the <u>ISSN International Centre</u>.<sup>97</sup> Using ISSNs offers a reliable way to distinguish one journal from another as well as identifying the publishing organisation.

After covering this basic requirement, journals often consider submitting an application to be listed in a journal index, as this provides credibility and is considered as a sign of the journal's quality. Indexes have specific requirements for inclusion, and these can vary significantly.

#### **Benefits of indexing**

Many authors will only submit their articles to journals that are indexed, due to the above-mentioned perception of quality or because this is a requirement of their funder or institution. Inclusion in a recognised index is very beneficial to the reputation of a journal and will lead to many more readers accessing its content as well as a higher rate of citations compared to non-indexed titles. Being indexed in multiple databases rather than just one increases the visibility and reach of journals even further. There is an underrepresentation of journals from some global regions in international indexes, but there are some region-specific databases such as Latindex<sup>98</sup> that aim to redress the balance.

Examples of funders that require indexing from their grantees include <u>the Bill and</u> <u>Melinda Gates Foundation</u><sup>99</sup> and <u>cOAlitionS</u>.<sup>100</sup> Funders' policies vary, however, with significant differences across global regions.

#### **Choosing an index**

When choosing an index, journals should focus on those that are most relevant to their scope, aims and focus. Coverage can vary, from the broadest databases such as

 <sup>&</sup>lt;sup>97</sup> International serial standard number international centre. (n.d.). ISSN International centre. <u>https://www.issn.org/</u>
 <sup>98</sup> Latindex. (n.d.). Latindex. <u>https://www.latindex.org/latindex/</u>

<sup>&</sup>lt;sup>99</sup> Gates Foundation. (n.d.). Our Policy. <u>https://openaccess.gatesfoundation.org/open-access-policy/</u>

<sup>&</sup>lt;sup>100</sup> cOAlition S. (n.d.). Why Plan S. <u>https://www.coalition-s.org/why-plan-s/</u>



<u>Scopus</u><sup>101</sup> and <u>Web of Science</u><sup>102</sup> to those that focus on regional publishing (e.g. <u>ScieLO</u><sup>103</sup> and the above-mentioned Latindex) and others that focus on specific publishing models (e.g. <u>Directory of Open Access Journals</u>,<sup>104</sup> naturally focussing on open access journals) or disciplines (e.g. <u>PubMed Central</u>,<sup>105</sup> <u>Medline</u>,<sup>106</sup> <u>PubMed</u>).<sup>107</sup> Each index will provide access to chosen features, too. For example, some cover citation data and abstracts, while others include article full texts.

There are also free online search engines such as <u>Google Scholar</u>,<sup>108</sup> which provides a dedicated search page but also shows relevant results via Google search. Being <u>indexed here</u><sup>109</sup> can be very valuable as general-purpose search engines are commonly used to identify academic literature.

#### The application process

In order to be indexed, a journal usually applies to the selected database, providing relevant documents and evidence. Each index will have different criteria, but they will generally check that the journal meets basic scholarly publishing standards. These may include checking that the journal has a clear scope, provides information on peer review, copyright and ethics, has a clear editorial board page with names and titles, issues <u>Digital Object Identifiers</u><sup>110</sup> (DOIs) and publishes <u>article-level metadata</u>.<sup>111</sup> It is free to apply for indexing, but there may be costs associated with complying with the index criteria, such as the <u>generation of XML files</u>.<sup>112</sup>

If the journal meets all the criteria, it will be indexed and become available to the users of that database. If the journal does not meet the criteria required for indexing, changes may need to be introduced to make sure that it becomes eligible. Journals that are rejected can typically reapply for inclusion at different time intervals, depending on the rules of each individual index.

<sup>102</sup> Clarivate. (n.d.). Web of science platform.

https://www.nlm.nih.gov/medline/medline\_overview.html

<sup>&</sup>lt;sup>101</sup> Elsevier. (n.d.). Scopus Preview. <u>https://www.scopus.com/home.uri</u>

https://clarivate.com/products/scientific-and-academic-research/research-discovery-and-workflow-solutions/webofscien

<sup>&</sup>lt;sup>103</sup> SciELO. (n.d.). SciELO. <u>https://www.scielo.org/</u>

<sup>&</sup>lt;sup>104</sup> DOAJ. (n.d.). DOAJ. <u>https://doaj.org/</u>

<sup>&</sup>lt;sup>105</sup> PubMed Central. (n.d.). Home. NIH National Library of Medicine. <u>https://www.ncbi.nlm.nih.gov/pmc/</u>

<sup>&</sup>lt;sup>106</sup> NIH National Library of Medicine. (n.d.). MEDLINE Overview.

<sup>&</sup>lt;sup>107</sup> PubMed. (n.d.). PubMed. National Library of Medicine. <u>https://pubmed.ncbi.nlm.nih.gov/</u>

<sup>&</sup>lt;sup>108</sup> Google Scholar. (n.d.). Google Scholar. <u>https://scholar.google.com/</u>

<sup>&</sup>lt;sup>109</sup> Google Scholar. (n.d). Inclusion Guidelines for Webmasters. <u>https://scholar.google.com/intl/en/scholar/inclusion.html</u>

<sup>&</sup>lt;sup>110</sup> DOI Foundation. (n.d.). Home page. <u>https://www.doi.org/</u>

<sup>&</sup>lt;sup>111</sup> Public Knowledge Project. (n.d.). Issue and Article Metadata.

https://docs.pkp.sfu.ca/metadata-practices/en/issue-article-metadata.

<sup>&</sup>lt;sup>112</sup> PubMed Central. (n.d.). PMC FAQs. NIH National Library of Medicine.

https://www.ncbi.nlm.nih.gov/pmc/about/faq/#q27



# Search engine optimisation and technical improvements

Topic leads: Katie Foxall, Wendy Patterson, Andy Byers

Search engine optimisation can support increased visibility, in combination with indexing in relevant databases and outreach to readers and authors. As researchers rely more and more on search engines to identify scholarly outputs, journals can derive significant benefits from the optimisation of their metadata and structured presentation of full text articles.

Many researchers begin their online investigation with search engines such as Google. Ensuring journals are well placed in organic search results through <u>search engine</u> <u>optimisation</u><sup>113</sup> will increase discoverability and opportunities for dissemination.

Search engine optimisation involves tweaking a website, content and social profiles to ensure they rank well in organic search results. This is different from paid searches, which involve placing adverts on the results page of a search engine based on the keywords entered by the user. The guidance presented here refers to organic search, and we note that further information on paid adverts is available via most search engines (see Further reading section).

#### Search engine optimisation

Including HTML versions of articles is desirable for search engine optimisation, as is <u>creating accessible PDFs</u>.<sup>114</sup> The provision of text-based descriptions of images is also helpful and improves the overall accessibility of the journal website, assisting users with screen readers.

To improve ranking in search results, journals can also provide guidance to their authors on how <u>articles themselves can be optimised</u>.<sup>115</sup> Key tips include using sharp and short titles, writing impactful abstracts and choosing keywords wisely. Linking on the web is also important for search engine optimisation, in both directions - links to journal content from other sites and vice versa. All of the references/citations in articles should include links to their source files, ideally using DOIs whenever possible.

Content recommendation engines such as <u>TrendMD</u><sup>116</sup> can be useful to improve readership, but there is often a fee involved.

<sup>&</sup>lt;sup>113</sup> Wikipedia. (2023, May 15). Search engine optimization. <u>https://en.wikipedia.org/wiki/Search\_engine\_optimization</u>

<sup>&</sup>lt;sup>114</sup> Library Publishing Coalition. (2017, December 13). LPC Webinar: Creating Accessible PDFs [Video]. Youtube. <u>https://www.youtube.com/watch?v=Ex-XdcO7hjk</u>

 <sup>&</sup>lt;sup>115</sup> Brouwer, W. P., & Hollenbach, M. (2022). Search engine optimization for scientific publications: How one can find your needle in the haystack. United European Gastroenterology Journal, 10(8), 906. <u>https://doi.org/10.1002/ueg2.12311</u>
 <sup>116</sup> TrendMD. (n.d.). TrendMD. <u>https://trendmd.com/</u>



#### **Technical improvements**

If there is a limited budget for search engine optimisation, journals can improve their position in organic search results in other ways. Key areas for journal websites to target include: good user experience (including in mobile browsers), provision of actionable and helpful information to visitors and, of course, delivering high-quality content.

Embedding tools to make it as easy as possible to share and cite journal articles is essential. Examples of social sharing solutions include <u>AddThis</u><sup>117</sup> and <u>Shariff</u>,<sup>118</sup> which are available to install for free.

<sup>&</sup>lt;sup>117</sup> AddThis. (n.d.). AddThis. <u>https://www.addthis.com/get/share/</u>

<sup>&</sup>lt;sup>118</sup> Shariff. (n.d.). Shariff. GitHub. <u>https://github.com/heiseonline/shariff</u>



### Journal and article level metrics

Topic leads: Wendy Patterson, Andy Byers

The aim of this section is to provide an overview of popular article- and journal-level metrics and to advise in choosing which may or may not be relevant for your open access journal. Here, the various types of metrics are summarised and cautions for responsible use are given.

Depending on a journal's subject area, readers and authors may expect to find certain publication metrics published directly on journal websites. The limitations and exact meaning of metrics are often not fully understood by authors and readers, which indicates that journals should carefully consider what they display. In this section, we provide an overview of article- and journal-level metrics.

#### **Article-level metrics**

Article-level metrics are citation metrics that attempt to quantify how an article is being discussed, shared, referenced and used. Metrics that are often included on journal websites or available to publishers include the following:

- Citation counts: Counting the number of citations that an individual article has received is a traditional and easy to understand metric that some publishers may choose to display. For example, Crossref members can obtain and display this information by using the <u>Cited By</u><sup>119</sup> API. Scopus, Dimensions (although Article-level metrics can be viewed in the freemium version) and Web of Science can also provide this information, but they are paid-for solutions. Although this information is also available via Google Scholar, no open API is available to support easy integration into journal websites.
- Page views and downloads: The number of times a website has been visited and the number of times that a PDF or the XML version of the article has been downloaded provide some insight into the scholarly visibility of the article. The number of accesses and downloads will be greatly affected by how well the journal is indexed.
- Altmetrics: Altmetrics add a measure of "social visibility", including shares and likes on various social media platforms, mentions in blogs and other platforms, and news articles and press releases about a published article. Examples include <u>Altmetric</u>,<sup>120</sup> <u>Plum Analytics</u><sup>121</sup> and <u>Crossref's Event Data</u>.<sup>122</sup>

#### Journal-level metrics

Journal-level metrics focus on the whole journal rather than on specific published articles. The most common options for journal-level metrics are outlined in the table

<sup>&</sup>lt;sup>119</sup> CrossRef. (n.d.). Cited-by. <u>https://www.crossref.org/services/cited-by/</u>

<sup>&</sup>lt;sup>120</sup> Altmetrics. (n.d.). Altmetric. <u>https://www.altmetric.com/</u>

<sup>&</sup>lt;sup>121</sup> Plum Analytics. (n.d.). Plum Analytics. <u>https://plumanalytics.com/</u>

<sup>&</sup>lt;sup>122</sup> CrossRef. (n.d.). Event data. <u>https://www.crossref.org/services/event-data/</u>



below, in the row titled 'Metrics available'. Notably, there are several data providers that allow the calculation of the same journal-level metrics, leading to likely differences in results.



	Web of Science	Scopus	Google Metrics	Lens.org	Dimensions
Title curation	High	High	None	Medium	Medium
Source of data	Self-curated	Self-curated	Self-curated	Crossref, PMC, Core, OpenAlex	Self-curated, Crossref, PMC, OpenCitations
Metrics available	In Journal Citation Reports: JIF, 5-year JIF, quartile ranking, Eigenfactor, JCI Other: h-index, citations/period	In SCImago Journal & Country Rank: SNIP, SJR, h5-index, quartile ranking Other: CiteScore, citations/period	h5-index	Citations/period	Citations/period
Interface access	Paywalled	Paywalled	Open	Open	Mostly paywalled
Metric access	Paywalled	Open	Open	Open	Open
Business strategy	Commercial	Commercial	Commercial	Non-profit social enterprise	Commercial
Access costs	High	High	Free	Free	High



#### Other ways to compare academic journals

Although not necessarily intended as a metric, a comparison across journals regarding their openness and transparency can be made using the Transparency and Openness Promotion (TOP) <u>Guidelines</u>.<sup>123</sup> Furthermore, journal policies, procedures and practices can be summarised into a metric-like form of the <u>TOP factor</u>.<sup>124</sup>

Other journal-level information that is of interest to readers and authors that is often compared includes the following:

- Publication time and time of various editorial steps (e.g., time to decision, peer review, acceptance)
- Number of submissions and publications
- Rate of desk rejection, overall rate of rejection
- Median number of reviews
- Price information

In these areas, however, there are no standardised metrics and comparisons tend to be ad-hoc and manual.

#### Limitations of publication metrics

The use of publication metrics has received increasing criticism, and debates regarding the relationship between such metrics and quality of the published content is being debated. The San Francisco Declaration on Research Assessment (DORA)<sup>125</sup> makes five recommendations<sup>126</sup> for publishers, including that they should "greatly reduce emphasis on the journal impact factor as a promotional tool, ideally by ceasing to promote the impact factor or by presenting the metric in the context of a variety of journal-based metrics" and "make available a range of article-level metrics to encourage a shift toward assessment based on the scientific content of an article rather than publication metrics of the journal in which it was published." The Leiden Manifesto<sup>127</sup> for research metrics encourages the development of "open, transparent and simple" data collection. Most recently, the Coalition for Advancing Research Assessment, which recommends that journal- and publication-based metrics are no longer used in research assessment.

<sup>&</sup>lt;sup>123</sup> OSF. (2023, March 02). Transparency and Openness Promotion (TOP): Guidelines. <u>https://osf.io/2cz65</u>

<sup>&</sup>lt;sup>124</sup> Mayo-Wilson, E., Grant, S., Supplee, L., Kianersi, S., Amin, A., DeHaven, A., & Mellor, D. (2021). Evaluating implementation of the Transparency and Openness Promotion (TOP) guidelines: the TRUST process for rating journal policies, procedures, and practices. Research Integrity and Peer Review, 6(1). https://doi.org/10.1186/s41073-021-00112-8

<sup>&</sup>lt;sup>125</sup> San Francisco Declaration on Research Assessment. (n.d.). The declaration. <u>https://sfdora.org/read/</u>

<sup>&</sup>lt;sup>126</sup> San Francisco Declaration on Research Assessment. (n.d.). The declaration. <u>https://sfdora.org/read/</u>

 <sup>&</sup>lt;sup>127</sup> Leiden Manifesto. (2015, April 23). Leiden Manifesto for research metrics. <u>http://www.leidenmanifesto.org/</u>
 <sup>128</sup> Coalition for Advancing Research Assessment (CoARA). (2022). Agreement on Reforming Research Assessment. <u>https://coara.eu/agreement/the-agreement-full-text/</u>



# Staffing

### **Roles and responsibilities**

Topic leads: Solange Santos, Tom Olijhhoek, Rebecca Wojturska

The management of a journal is a collaborative effort between the editor(s)-in-chief, the editorial board and editorial staff. The roles and responsibilities of each member of the editorial team should be clearly defined and aligned with their areas of expertise, to ensure that the journal meets rigorous scientific and ethical standards and adheres to best practices in scholarly communication.

Every journal is different, but a full editorial team can comprise an editor-in-chief, an associate editor, journal manager and an editorial board, plus occasional guest editors for special issues. It is likely that, in some journals, various roles (e.g. technical editor, journal manager) may all be performed by the editor-in-chief; other journals may have no staff at all, with all roles being performed by volunteer scholars. It is important to point out that, due to limited staff and the many assignments to perform, some technical activities (e.g. copyediting, typesetting, and generating XMLs) may be entrusted to specialist service providers.

#### **Editor-in-Chief**

The Editor-in-Chief is the most senior editor and oversees the entire journal. The Editor-in-Chief guides the overall strategy of the journal and is responsible for all final decisions, the overall quality of the content and the future direction of the journal. Their <u>responsibilities</u><sup>129</sup> may include:

- Managing the day-to-day operations of the journal
- Deciding on topics, content, and contributors for future issues
- Assigning clear roles and responsibilities to all team members
- Managing and maintaining regular contact with the editorial board
- Managing an efficient peer-review process, alongside the editorial team, to ensure prompt publication
- Ensuring that content meets the quality standards of the journal
- Ensuring that the content of contributions meets appropriate ethical requirements
- Ensuring articles are original and have not been published in other journals
- Resolving research integrity problems (e.g. plagiarism or falsification)
- Generating ideas to promote the journal and increase readership

In larger journals, the editor-in-chief may share some of these responsibilities with a managing editor or other members of the editorial team or board.

<sup>&</sup>lt;sup>129</sup> ASHA Journals Academy. (n.d.). The role of the Editor-in-Chief. <u>https://academy.pubs.asha.org/erc/editor-in-chief/</u>



#### Editors

Editors are recognised individuals in their field of expertise. They pay close attention to the latest advances in research and are well connected with their communities. Their <u>responsibilities</u><sup>130</sup> may include:

- Screening manuscripts against submission criteria
- Recommending peer reviewers and growing the peer reviewer database
- Coordinating the peer review process and ensuring timely publication
- Supporting Editors-in-Chief to implement journal policies

#### Journals managers and managing editors

Journals managers and managing editors are typically individuals with strong oral and written communication skills, are technology savvy, and are able to focus on author services. Their responsibilities may include:

- Managing the staffing of the journal
- Communicating with editors, editorial assistants and internal departments
- Managing correspondence with authors, reviewers and editors and providing prompt responses
- Coordinating editorial activities and tracking the progress of peer review
- Ensuring long-term archiving and preservation by maintaining data on websites
- Demonstrating journal performance and agreed standards and performance indicators
- Making recommendations to improve journal performance
- Ensure that the journal remains competitive and relevant by monitoring broader publishing trends

#### **Guest Editors**

Guest Editors are experienced researchers or experts in their fields. Their responsibilities<sup>131</sup> may include the following:

- Encouraging authors to contribute and developing author invitation lists for special issues
- Overseeing the content of special issues alongside Editors-in-Chief and Associate Editors
- Generating ideas to promote special issues

https://www.amegroups.com/pages/journal-management

 <sup>&</sup>lt;sup>130</sup> American Psychological Association. (n.d.). Publishing in a scholarly journal:Part two, role of the editorial board.
 <u>https://www.apa.org/pubs/journals/resources/publishing-tips/editorial-board</u>
 <sup>131</sup> AME Publishing. (2022, April 25). Journal Management (Editorial Roles).



### **Recruiting journal staff**

Topic leads: Solange Santos, Elle Malcolmson, Andy Nobes

Editors, peer-reviewers, managers, production staff and other internal personnel all have a role to play in establishing and maintaining technical quality standards and ensuring that all submissions meet rigorous scientific and ethical standards. Recruiting, training, and developing journal staff is both a challenge and an investment. Considering diversity among your workforce is a responsibility.

Trying to build a strong journal team and editorial board is a complex challenge. Successful journals develop recruitment strategies that are tailored to their specific needs and growth targets and review this on a regular basis. Recruitment in journals is not dissimilar to other organisations, but care must be taken in covering the broad range of roles and responsibilities typical to journal publishing.

When a journal is starting, a very small team is often appropriate, but recruitment should be considered as the volume of publication grows. Volunteers may be useful especially under a limited budget: the editor's prestige and contacts can be leveraged to find volunteer researchers willing to work with the journal.

Do keep in mind that recruitment is only the first step to develop journal staff. Providing relevant training and developing opportunities for your team is key, alongside having clear career growth and advancement opportunities (see <u>Training and</u> <u>staff development</u>).

#### Key steps

We recommend the following key steps are followed when recruiting for your journal:

- Determine which roles are essential to your journal: Before starting to recruit your team, identify the roles and responsibilities that you think are essential at the current stage of development of your journal. The section Roles and responsibilities provides further detail on this.
- Define the requirements for each role: Before advertising positions, ensure the skills required for each role are clear. Journal staff should have defined roles and responsibilities to ensure smooth operations. As part of this, consider if prior publishing experience is really necessary, as well as whether a specific degree, doctorate or other professional experience may be useful.
- Advertise the roles: Academic job boards, professional associations, the journal's website, social media and other journals that allow advertising may be a good starting point for your advertising efforts. Particularly as a journal is starting, it may be helpful to ask existing or former editorial board members/guest editors to recommend suitable colleagues or to consider frequent authors or reviewers in the journal (and competing journals too).



- Screen applications: Screen against the job requirements, considering relevant experiences, qualifications and demonstrated skills. This is especially important if you are looking for individuals who can promptly start supporting you in running the journal.
- Conduct interviews: Conduct the interviews with promising candidates, either in person or remotely. Remote candidates are likely to be needed, as editorial staff and board members are often from different countries and institutions.

#### Compensation for journal staff

In cases where journals seek to recruit industry professionals, compensation is expected in the form of a salary. However, when academics are supporting a journal alongside their research or teaching responsibilities, there is an unspoken <u>expectation</u> that they would work without compensation.<sup>132</sup> This arises from the widespread perception that working with or for journals is simply part of the job and may be compensated by the growth in standing and prestige in one's discipline arising from taking such a role. This concept, however, is being increasingly challenged by academic communities, including through demands for more transparency.

Although some individuals may be willing to support journals for free, whether this is feasible depends on their full time occupation and salary, with significant variation around the globe. In some cases, journals may pay limited expenses for academics in an editorial role (e.g. conference attendance, travel), while in others a more formal payment is offered. Several academics opt to receive such a payment in their departmental or research budget, to fund ongoing work or the time of other researchers (e.g. PhDs, post-doctoral researchers).

The discussion around journal staff compensation is evolving, and there is no broadly accepted best practice. As a result, we recommend that journals carefully discuss this internally prior to advertising new positions, including in light of current funding available and future forecasts.

#### Other considerations for inclusive recruitment

Journals, like any other organisation, should always adopt <u>inclusive recruitment</u> <u>practices</u>.<sup>133</sup> Recruitment processes should consider inclusion, equity and diversity in order to build more representative staff and editorial boards. Key dimensions to consider include diversity in terms of gender, nationality and culture, and it is often helpful to proactively encourage individuals from minority groups, indigenous groups and persons with disabilities to apply.

https://www.scienceguide.nl/2019/04/so-what-about-editor-compensation/

<sup>&</sup>lt;sup>132</sup> Science Guide. (2019, April 09). So what about editor compensation?

<sup>&</sup>lt;sup>133</sup> Scholarly Kitchen. (2017). Guest Post — "Essential and Existential": The Work of Equity and Inclusion in Scholarly Publishing.

https://scholarlykitchen.sspnet.org/2017/10/25/guest-post-essential-existential-work-equity-inclusion-scholarly-publishing/



The above <u>is achieved</u><sup>134</sup> by using equitable and inclusive language in job descriptions and by following inclusive interview and work practices.

<sup>&</sup>lt;sup>134</sup> Carnahan, B. (2021, August 16). 6 BEST PRACTICES TO CREATING INCLUSIVE AND EQUITABLE INTERVIEW PROCESSES. Harvard Business School.

https://www.hbs.edu/recruiting/insights-and-advice/blog/post/6-best-practices-to-creating-inclusive-and-equitable-inter view-processes



### Building an editorial board

Topic leads: Wendy Patterson, Alex Mendonça, Andy Nobes, Rebecca Wojturska

The editorial board is a core component of academic journals and can provide advice, assist in developing policies and strategy and play a role in the peer-review process. Board members can also help promote and give visibility to the journal. Before appointing members of the editorial board, the roles, responsibilities and expectations between the publisher, owner and editorial board members must be clearly defined and understood.

The editorial board is typically an internationally diverse group of recognised researchers who have a strong interest in academic publishing. Members of the editorial board are sometimes seen as a proxy for the quality of the journal, so it is essential to make efforts to recruit the right individuals: these are expected to have strong networks and to act as ambassadors for the journal.

#### **Key responsibilities**

The <u>role of the editorial board</u><sup>135</sup> may vary based on the size of a journal: in smaller journals, the board is likely to have a more hands-on role, with involvement in journal operations, while, in larger journals, they may focus on governance, accountability and strategy.

Overall, the responsibilities of editorial board members may include a mix of the following:

- Providing scientific expertise for the journal
- Recommending expert reviewers
- Identifying new topics for commission, or for special issues
- Advising on the strategic direction of the journal
- Providing external accountability to the journal's staff
- Recommending potential authors or guest editors
- Peer reviewing articles and providing constructive suggestions to authors regarding article content, structure, relevance and areas for improvement
- Providing content in the form of occasional editorials and other short articles
- Promoting the journals to authors and readers and encouraging peers to submit their work

A terms of reference document is particularly helpful to outline responsibilities, the structure of the board, the terms of membership (including term limits) and relationship between the board and any sub-boards that the journal may decide to establish. It will also often define the frequency and conduct of meetings, the rules of appointment and is typically a public document.

<sup>&</sup>lt;sup>135</sup> Springer nature. (n.d.). Editorial Boards. <u>https://www.springer.com/gp/authors-editors/editors/editorial-boards/</u>



If editorial board members have access to sensitive information, receive compensation or directly handle manuscripts, it is recommended to require a written agreement or contract. This will clarify the level of contribution expected (including measures of performance), details of any payments or reimbursements, a definition of potential conflicts of interest and term limits.

#### The balance between governance and operations

Ideally, a board is most effective when it can focus on governance rather than operations. This way, a structured approach to accountability can be put into place, building and enhancing the credibility of the journal and, in principle, strengthening its ability to make good strategic choices for future developments.

If a journal wishes to expand its publishing programme, for example by introducing new journals, the editorial board may be useful to consider the benefits of doing so. Where a journal is part of an institution, such as a university press, an additional service board may be useful to ensure the journal remains aligned with the institution, particularly as the institution itself adapts to the external environment. Members of the board may include librarians, editors, authors and external partners.

#### Editorial board membership

One of the most important factors for a successful journal is an active, widely respected, diverse and representative editorial board. Therefore, when assembling the initial board, journals should consider an appropriate mix of individuals with expertise aligned with the journal's scope and sufficient time to devote to the role. The reputation of editorial board members can significantly enhance the reputation of the journal itself, and having a reputable editorial board may contribute to getting the journal indexed. As with other recruitment efforts (see Recruiting journal staff), equality, diversity and inclusion should be a priority. In selecting members, it is advisable to avoid using author metrics such as the h-index or other limited measurements of impact.

#### Recruiting an editorial board

It may be difficult to identify suitable editorial board members, but there are several resources at a journal's disposal. The following are potential leads that journals should consider:

- When starting a journal
  - Former editorial board members of similar or competing journals
  - Authors of key reviews in the journal's discipline
  - Contacts made at conference or meetings
  - Speakers at conferences
  - Frequent authors or reviewers in competing journals
  - Experts listed on institute and society websites
- When the journal is already running



- Former guest editors
- Recommendations from other board members
- Frequent authors or reviewers in the journal
- Open calls via the journal's website or social media
- Open calls in discipline-specific magazines where advertising is allowed



### Training and staff development

Topic leads: Alex Mendonça, Andy Nobes

After a journal's editorial team is formed, training and skills development have to be pursued to ensure that all the core responsibilities can be covered and that the journal follows best practice in scholarly communication. As online journals are based on digital tools and infrastructure, it is especially important to remain up to date with the latest developments and upskill staff as required.

Authors have a set of expectations when they submit their articles to journals, including a quick, comprehensive and fair evaluation process, accurate editing, fidelity to the text, speed and academic impact. These expectations fundamentally depend not only on the quality of the article submitted, but also on the quality of the journal's editorial processes. Submission platforms, tools for quicker assessment, editorial quality and a well-trained journal staff are crucial editorial elements to meet authors expectations. This highlights the key role of training, awareness raising and upskilling, including because technology and platforms may change or be updated as a journal grows.

#### Awareness of the journal's policies authors guidelines

All staff members and members of the editorial board must be fully aware of the journal's policies and submission guidelines, which must be publicly available on the journal's website. Many individuals are involved in the peer review process, from the very moment a new submission is made until the final decision: therefore, it is particularly important to make sure there is a consistency throughout the entire workflow and that everyone abides to a consistent and transparent set of rules.

#### Knowledge of the journal's submission system

Once the journal has chosen a submission system, all staff should know how to operate it. In particular, editors must be familiar enough with the system's workflows, tools and capabilities. It is highly recommended that staff undertake training on the submission platform when they start.

When the budget is limited, one or more individuals can be tasked with learning in detail how the platform operates, in order to later provide training and/or support to the rest of the team. Journals may find it helpful to create their own set of customised documentation targeting their staff, reviewers or authors. Should this be the case, keeping documentation updated and easily findable by its intended users is essential.

#### Upskilling and continuous professional development



Submission platforms are frequently upgraded to include enhancements (which sometimes include new tools and features) and bug fixes. As a result, it is crucial that the journal promotes new training sessions, which could be focused on specific topics or cover the entire publishing workflow. It is likely that training, help pages and/or videos are made available by the chosen software provider, and this should be the preferred source of training materials as it is likely to be kept up to date as new features are introduced or old features are phased out.





### Developing author guidelines

Topic leads: Alex Mendonça, Wendy Patterson, Tom Olijhoek

Author guidelines are the manifestation of a journal's editorial policy. They help guide potential authors in structuring their article correctly and prepare it for submission. Guidelines often also inform authors on Article Processing Charges and license/copyright conditions. Having clear and straightforward author guidelines will save support time from the editorial team and facilitate indexing and admission to journal indexes.

Author guidelines are an expression of the journal's editorial policy and workflow and should be presented transparently. Prior to submitting their manuscripts, authors typically check author guidelines, so these should leave little to no questions left. Author guidelines are also used by journal staff and the editorial board to check that submitted papers are compliant. Moreover, indexes and other discovery services may also check the author guidelines against their own indexing policy.

Author guidelines should ideally be reviewed and updated at least annually, or every time there is a change in the journal's editorial policy. For that reason, it is advisable to publicly state the date of the last updates and keep an internal record of previous versions, if possible. If author guidelines are made available in different places (e.g. the journal website and the submission platform), care must be taken to ensure that the exact same guidance is being provided.

#### Key components of author guidelines

Ideally, a journal's guidelines for authors should cover the following items:

- Journal scope, aims and focus
- Languages accepted for submission and publication and information on whether translation options are available
- Journal's privacy policy
- Description of the journal's archival policy
- Content types accepted by the journal
- Clear description of the journal's evaluation workflow, including any variation based on content type
- Details on the required formatting and structure or sections for the various content types
- Instructions on what should be included in the cover letter (if required)
- File formats accepted for submission (e.g. Word, pdf, LaTeX)
- A description of how figures, tables and schemes should be prepared, including required resolution and acceptable file formats
- Bibliographic standards adopted for citations and bibliographic references to other texts, research data, methods, computer programs and other materials



- Expression of journal's commitment to ethics and best practices in research communication
- Statements on research integrity and plagiarism policy
- Description of how corrections, retractions and concerns are handled
- Description of the appeals process
- Author's rights and their responsibilities
- Instructions on how authors should inform individual contributions for the manuscript (using a taxonomy is advisable, such as <u>CRediT</u>)<sup>136</sup>
- Policy on conflict of interest
- Information on licensing and copyright retention
- Information on reporting funding sources
- Open science practices, including the journal's policy for accepting preprints, research data availability statements and open peer review
- Clear indication of any kind of fees related to the submission or publication of the manuscript, including any other scenario where fees may be collected from authors
- Instructions regarding obtaining permission for and the correct use of copyrighted material
- Any other instructions specific to the journal's subject area (e.g. principles for submission to <u>medical journals</u>)<sup>137</sup>

Journals might consider developing document templates for the various file formats accepted for submission and providing a download link in the guidelines for authors. This will make it easier for authors to comply with the journal's manuscript format requirements.

If in doubt about the development of your own author guidelines, it is recommended that the guidelines of journals in similar fields are reviewed and considered as a starting point.

#### Dealing with the growing use of AI (artificial intelligence)

The use of AI techniques in research articles is growing quickly. Examples include ChatGPT and other Large Language Models. Because these cannot take any responsibility for the submitted work, artificial intelligence tools <u>do not satisfy the</u> <u>conditions for authorship</u>.<sup>138</sup>

Authors remain fully responsible for the content of their manuscript, even those parts produced by an artificial intelligence tool, and are therefore accountable for any breach of publication ethics.

<sup>&</sup>lt;sup>136</sup> CRediT. (n.d.). Contributor Roles Taxonomy. <u>https://credit.niso.org/</u>

<sup>&</sup>lt;sup>137</sup> International Committee of Medical Journal Editors (ICMJE). (n.d.). Preparing a Manuscript for Submission to a Medical Journal. <u>https://www.icmje.org/recommendations/browse/manuscript-preparation/preparing-for-submission.html</u>

<sup>&</sup>lt;sup>138</sup> COPE. (2023, February 13). Authorship and AI tools. Committee on publication ethics. <u>https://publicationethics.org/cope-position-statements/ai-author</u>



### Publication ethics and related editorial policies

Topic leads: Andrea Chiarelli, Chris Hartgerink

Editorial policies are key to support the publication of high-quality, ethical research. They can address good research practice, conflict of interest, intellectual property, open sharing and more. Editorial policies should be clearly communicated to authors, reviewers and readers, and editors should be fully aware of the journal's position in these dimensions to ensure that any issues are dealt with promptly and consistently.

Editorial policies are essential for maintaining the quality, integrity and credibility of academic journals. They provide guidelines for authors, reviewers and editors to ensure that the publication process is consistent, transparent and fair. It is the duty of editors and publishers to preserve the integrity of their journals: they must clearly communicate editorial policies and procedures for dealing with issues like plagiarism, citation manipulation and data falsification/fabrication.

#### Promoting ethical research practices

Editorial policies help promote <u>ethical research practices</u><sup>139</sup> and prevent the publication of fraudulent or unethical research. These policies should outline the journal's stance on issues such as plagiarism, data fabrication and image manipulation, as well as providing <u>guidelines for addressing potential breaches</u><sup>140</sup> of research ethics. Journal policies should also cover <u>authorship and contributorship</u>,<sup>141</sup> including the processes followed in cases where these are disputed, and their <u>complaints and appeals</u> <u>process</u>.<sup>142</sup>

In addition to outlining ethical standards, editorial policies should also provide guidance on the responsible conduct of research in their chosen <u>disciplinary domain</u>. By promoting ethical research practices and holding authors accountable for their work, editorial policies help to maintain the integrity of the scientific record and protect the reputation of the journal.

#### Addressing conflicts of interest

<u>Conflicts of interest</u><sup>143</sup> can arise in various stages of the publication process, including among authors, reviewers and editors. Editorial policies should clearly define what constitutes a conflict of interest and provide guidelines for managing and disclosing

<sup>&</sup>lt;sup>139</sup> COPE. (n.d.). Ethical Oversight. Committee on Publication Ethics. <u>https://publicationethics.org/oversight</u>

<sup>&</sup>lt;sup>140</sup> COPE. (n.d.). Allegations of Misconduct. Committee on Publication Ethics. <u>https://publicationethics.org/misconduct</u>

<sup>&</sup>lt;sup>141</sup> COPE. (n.d.). Authorship and contributorship. Committee on Publication Ethics. <u>https://publicationethics.org/authorship</u>

<sup>&</sup>lt;sup>142</sup> COPE. (n.d.). Complaints and appeals. Committee on Publication Ethics. <u>https://publicationethics.org/appeals</u>

<sup>&</sup>lt;sup>143</sup> COPE. (n.d.). Conflicts of interest / Competing interests <u>https://publicationethics.org/competinginterests</u>



these conflicts. Transparent and well-defined policies help to ensure that the peer-review and editorial decision-making processes remain unbiased and objective.

For instance, editorial policies may require reviewers to disclose any conflicts of interest, such as personal or professional relationships with the authors, financial interests in the research or prior access to the manuscript. Similarly, editors should recuse themselves from handling manuscripts where they have conflicts of interest.

#### Protecting intellectual property

Another important aspect of editorial policies is the protection and management of <u>intellectual property rights</u>.<sup>144</sup> Academic journals need to establish clear guidelines for authors regarding copyright, licensing and the use of third-party materials. This helps to ensure that the rights of authors, publishers and other stakeholders are respected and protected.

Editorial policies should specify the <u>copyright and licensing</u> terms applicable to published articles. For instance, some journals may require authors to transfer copyright to the publisher, while others may adopt a more flexible approach, such as using Creative Commons licences that allow authors to retain certain rights. Additionally, policies should provide guidance on the proper attribution and citation of sources, as well as the use of copyrighted materials, such as images, figures or text from other publications.

#### Setting expectations around data sharing and reproducibility

<u>Data sharing and reproducibility</u><sup>145</sup> are emerging as key components of robust and transparent scientific research. Editorial policies should encourage authors to make their data, code and methods publicly available, allowing other researchers to verify, reproduce or build upon their findings.

Editorial policies should outline the journal's requirements for data sharing, including any preferred repositories or data formats, as well as expectations for data citation and acknowledgement. Notably, different types of repositories are available, including institutional, disciplinary or generalist. Because many repositories are available, it may be challenging for journals to find and choose a suitable option to recommend to authors. The <u>re3data</u><sup>146</sup> database may be a helpful starting point in this regard, but journals may also consider mirroring the requirements of other journals in similar fields.

In some cases, journals may require authors to submit a data availability statement, detailing how and where their data can be accessed. Additionally, policies should provide guidance on sharing other research materials, such as software, algorithms

<sup>&</sup>lt;sup>144</sup> COPE. (n.d.). Intellectual Property. Committee on Publication Ethics. <u>https://publicationethics.org/intellectualproperty</u>

<sup>&</sup>lt;sup>145</sup> COPE. (n.d.). Data and reproducibility. Committee on Publication Ethics. <u>https://publicationethics.org/data</u>

<sup>&</sup>lt;sup>146</sup> Re3data. (n.d.). Home. <u>re3data.org</u>



and detailed methodologies, which are critical for ensuring the reproducibility of published results.



### **Compliance with funder policies and mandates**

Topic leads: Tom Olijhoek, Lucia Loffreda, Clarissa F. D. Carneiro

Funder policies and mandates increasingly focus on open access, and publishers have a growing need to provide authors with publishing options that comply with these. An absence of suitable copyright and licensing options means that funded authors may be unable to publish their outputs in their preferred journal.

Today, many national and international funders (including the European Commission, government agencies and private foundations) have open access policies and mandates. These require grant recipients to provide open access to published results arising from funded research. In some cases, funders have specific requirements in terms of immediate open access publishing, licensing and copyright retention.

Broadly speaking, if a journal publishes under the diamond or the gold model (see <u>What is an open access journal?</u>) and meets minimum technical requirements (e.g. as required by <u>cOAlition S<sup>147</sup></u> and in the <u>2022 OSTP Memorandum</u>),<sup>148</sup> then it is likely to be compliant with funder requirements for open access publication. Hybrid journals, or journals looking to <u>transition to open access</u>, may however need to seek further guidance on compliant publishing routes, particularly as openness is growing to become a standard expectation.

#### Navigating funder requirements around the world

Open access requirements set by research funders vary around the world. However, most public research funders <u>expect grant holders</u><sup>149</sup> to publish outputs arising from funded research in gold open access venues or to self-archive publications in open access repositories, potentially allowing an embargo period (green open access - see <u>Glossary</u>).

Research funders often specify licence options, too, meaning that open access journals should ensure that the set of licences available to authors is aligned with expectations. Offering Creative Commons licences is the easiest way to comply with the most widespread funder requirements, and we recommend that journals do not craft custom licensing options or offer less common licences to their authors (unless there is a clear rationale for doing so).

<sup>&</sup>lt;sup>147</sup> cOAlition s. (n.d.). Principles and implementation.

https://www.coalition-s.org/addendum-to-the-coalition-s-guidance-on-the-implementation-of-plan-s/principles-and-implementation/

<sup>&</sup>lt;sup>148</sup> Office of Science and Technology. (2022, August 25). Nelson memo.

https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-Access-Memo.pdf <sup>149</sup> Open Access Network. (2022). Research Funders and Open Access.

https://open-access.network/en/information/financing/research-funders-and-open-access



Where a journal does not offer compliant publishing options for a funded author, the author may be unwilling or unable to publish in that journal. It is therefore important to identify key funders for the subject area(s) served by the journal and keep up-to-date with changes in their policy requirements. Some databases and tools can help to find up to date information on funder requirements relating to open access:

- <u>Sherpa Juliet</u><sup>150</sup> is a searchable database and single focal point of up-to-date information concerning international funders policies and their requirements on open access, publication and data archiving.
- <u>ROARMAP</u><sup>151</sup> is the Registry of Open Access Repository Mandates and Policies. It is a database of international funder and institutional open access policies.
- <u>cOAlition S Journal Checker Tool</u><sup>152</sup> allows authors funded by funders belonging to cOAlition S to determine whether they may publish in a given journal.

<sup>&</sup>lt;sup>150</sup> Jisc. (n.d.). Sherpa Juliet.. <u>https://www.sherpa.ac.uk/juliet/</u>

<sup>&</sup>lt;sup>151</sup> The Registry of Open Access Repositories Mandatory Archiving Policies (ROARMAP). (n.d.). ROARMAP. https://roarmap.eprints.org/

<sup>&</sup>lt;sup>152</sup> cOAlition S. (n.d.). Journal Checker tool. <u>https://journalcheckertool.org/</u>



### **Copyright and licensing**

Topic leads: Tom Olijhoek, Solange Santos, Andy Byers

Copyright is a type of intellectual property, aiming to protect creative works. Academic articles are protected by copyright, and authors can decide how their work may be used, published or shared by readers and other researchers. When publishing via open access, authors can either retain copyright in their work and license it, or transfer copyright or commercial rights to a publisher. Open access journals are ideally placed to raise awareness of licensing options and to encourage authors to apply permissive licensing terms.

<u>Copyright</u><sup>153</sup> gives its owner the exclusive right to copy, distribute, adapt, display and perform a creative work, usually for a limited time. In the context of academic publishing, copyright is an essential concept, as it has long underpinned the traditional subscription model: in this case, publishers own the copyright of published work and are able to sell it via subscriptions or on a per-article basis. In recent years, the move to open access has challenged this approach, introducing decision points for journals and authors alike and a breadth of new business models (see <u>Flipping a journal to open access</u>).

#### The difference between subscription and open access journals

In the case of subscription journals, authors have two mechanisms to transfer copyright to their chosen publisher. The first option is called copyright assignment and consists in signing a contract that transfers the copyright from the author to the publisher (which may also be a learned society). The second option is to grant the publisher an exclusive licence to publish, whereby the author would retain copyright but give the publisher exclusive rights to publish and disseminate the work. In both cases, the publisher will handle reuse requests on the author's behalf and protect the article by taking action if copyright is infringed or in cases of plagiarism.

When choosing to publish via open access, two possibilities exist.

- Authors who keep their copyright choose a license and give the publisher the right of first publication. In this case, the authors will not be subject to the terms of the license chosen. Most frequently, journals opt to offer <u>Creative Commons</u> <u>licences</u>,<sup>154</sup> which benefit from simplicity, standardisation and broad usage across scholarly communication.
- When authors transfer their copyright or their commercial rights, the publisher can choose a license which will also apply to the authors themselves. For example, if the publisher has chosen to publish using a CC-BY-NC license, the authors can no longer use their own work commercially.

<sup>&</sup>lt;sup>153</sup> Wikipedia. (2023, May 02). Copyright. <u>https://en.wikipedia.org/wiki/Copyright</u>

<sup>&</sup>lt;sup>154</sup> Creative commons. (n.d.). About CC licences. <u>https://creativecommons.org/about/cclicenses/</u>



#### Helping authors choose the right licence

Picking a licence is not easy, as awareness of the implications of licensing decisions on reuse rights is limited. Open access journals are ideally placed to raise awareness on this topic, as authors are asked to choose what licence to apply to their work as part of the publication workflow. Journals can provide guidance on their websites, too, and encourage submitting authors to use the Creative Commons License Chooser<sup>155</sup> to identify the most permissive licensing terms that they are comfortable with.

Importantly, journals and authors alike should be aware that permissive licensing and open access publication are never compatible with statements such as 'All rights reserved'. By definition, the application of a permissive licence waives some rights (depending on the licence), which makes an 'All rights reserved' statement meaningless and not enforceable. Creative Commons describe their own licences as "<u>Some rights</u> reserved", <sup>156</sup> as authors are given a spectrum of choices between retaining all rights and relinquishing all rights (public domain).

#### Fair use

<u>Fair use</u><sup>157</sup> is a crucial aspect of copyright law that allows for limited use of copyrighted material without requiring permission from the rights holder. This legal doctrine serves to promote creativity, innovation and public interest by providing a balance between the rights of creators and the needs of users. Fair use often applies in cases of criticism, commentary, news reporting, teaching, scholarship and research. To determine whether a particular use qualifies as fair, courts generally consider four factors: the purpose and character of the use, the nature of the copyrighted work, the amount and substantiality of the portion used, and the potential impact on the market for the original work.

Notably, fair use does not apply to the reuse of open access materials. However, the inclusion of copyrighted contents as part of a published open access article may require authors and journals to be aware of this mechanism.

<sup>&</sup>lt;sup>155</sup> Creative commons. (n.d.). Choose a Licence. <u>https://creativecommons.org/choose/</u>

<sup>&</sup>lt;sup>156</sup> Creative commons. (n.d.). Frequently Asked Questions. <u>https://creativecommons.org/faq/</u>

<sup>&</sup>lt;sup>157</sup> Wikipedia. (2023, May 12). Fair use. <u>https://en.wikipedia.org/wiki/Fair\_use</u>



### **Displaying licensing information**

Topic leads: Solange Santos, Rebecca Wojturska

Licensing is important to set out the reuse terms for published articles. The most common licenses used in open access journals are Creative Commons licenses, which can be displayed visually, using a logo, via text as well as through structured and machine-readable metadata.

As academic journals play a critical role in disseminating research findings, it is essential for them to promote the ethical use of published content. To achieve this, journals should effectively display licensing information, which clarifies the terms under which published articles can be used, distributed and adapted by others. To support easy and lawful reuse, journals should ideally adopt standardised licences, of which <u>Creative Commons</u><sup>158</sup> is a widely used example.

Authors are ultimately responsible for making choices about copyright and licensing, but journals need to offer the infrastructure to implement those choices. Part of this should be in the form of helpful web design and user experience, but training and awareness raising are also important. Following author decisions around copyright and licensing, journals should also be prepared to pursue legal action in cases of non compliance or misuse.

#### Displaying licensing information for published articles

The chosen licence should be prominently displayed on individual article pages in all formats (e.g. HTML, pdf), ideally near the title and author information. This allows readers to quickly identify the terms under which they can use the content. Additionally, providing a link to the full text of the licence is important to help users understand the specific rights and limitations associated with the work.

Furthermore, incorporating licensing information into the article's metadata ensures that this information is easily discoverable by search engines, databases and other indexing services. This enhances the visibility of the article and helps users understand the terms of use when they encounter the content through search results or third-party platforms.

When users download articles in pdf or other formats, it is crucial that the licensing information is included within the file itself. This ensures that the terms of use remain clear, even when the content is accessed offline or shared through other channels. In addition to the main article, licensing information should also be displayed for any supplementary materials, such as datasets, images, videos, or code.

<sup>&</sup>lt;sup>158</sup> Creative Commons. (n.d.). About the licenses. <u>http://creativecommons.org/licenses/</u>.



#### Monitoring and enforcing compliance

Journals should regularly review their licensing practices to ensure that they align with industry standards and best practices. They should also be prepared to address any instances of non-compliance or misuse of published content by working with authors, institutions and other stakeholders to resolve issues and maintain the integrity of the scholarly record.

#### Displaying licensing and copyright for the journal's website

Journals should be aware that there is a difference between the licence terms applied to individual articles and the licence terms applied to their website. For example, an open access journal may state <u>'All rights reserved'</u> in its footer, with reference to the website's design, branding and overall guidance or policies. As long as an appropriate licence is displayed clearly on individual articles, then this is not problematic from the point of view of open access good practice.

However, should an open access journal only state 'All rights reserved' and not display licensing information on individual articles, this would create ambiguity for readers and potential reusers and is likely to be in breach of the choice made by the author as part of the publishing workflow.



### **Corrections and retractions**

Topic leads: Andrea Chiarelli, Clarissa F. D. Carneiro, Alex Mendonça

Once an article has been published, it is referred to as the version of record. This is understood to be a reliable and complete version of the article, which others can cite and build upon. If an author identifies an error or inaccuracy in the version of record, this can be addressed through a correction, an expression of concern, a retraction or, more rarely, a removal.

A published article is referred to as the version of record. This is intended as the final version of the article after peer review and is meant as a permanent entry in the scholarly record. Formally speaking, the version of record includes the article itself, the abstract, any references, all images and tables and supplementary materials, if any. The key expectation is that the version of record remains unchanged in time, as this is what other researchers may cite or build upon. There are, however, some cases where it may be appropriate to issue a correction, an expression of concern, a retraction or, more rarely, a removal. The way a journal manages these occurrences must be <u>clearly</u> and transparently described.<sup>159</sup>

#### Corrections

A correction is issued when errors or omissions affect how the article is interpreted, but the integrity of the findings remains unaltered. Examples where this is appropriate may include missing information (e.g. on funding or competing interests) or mislabelling of figures, tables or other forms of data.

#### **Expressions of concerns**

An <u>expression of concern</u><sup>160</sup> is considered when major doubts about an article have emerged, for example in terms of research or publication misconduct. It serves as a warning to readers that the findings reported in the article may not be reliable and that care should be taken in reusing or building on them.

Where investigations of the concerns raised provide conclusive evidence of misconduct or serious issues, corrections or retractions typically follow the expression of concern. However, the expression of concern may remain as is if investigations are inconclusive or it is difficult or impossible to investigate the issues identified (e.g. limited cooperation from authors and/or their institutions).

<sup>&</sup>lt;sup>159</sup> COPE. (2022). Ethics toolkit for a successful editorial office. Committee on publication ethics. <u>https://publicationethics.org/sites/default/files/cope-ethics-toolkit-journal-editors-publishers.pdf</u>

<sup>&</sup>lt;sup>160</sup> COPE. (n.d.). Expressions of concern. Committee on publication ethics. <u>https://publicationethics.org/files/Notes%20from%20Forum%20Discussion%20Topic Expressions%20of%20concern fina</u> <u>l.pdf</u>



#### Retractions

<u>Retractions</u><sup>161</sup> are issued when major errors in any part of the article make the discussion or conclusions unreliable, or where severe cases of misconduct have taken place. Examples of misconduct that can easily lead to retractions include plagiarism, ghost authorship, fraudulent authorship or manipulation of the peer review process.

Importantly, retractions may arise from honest errors, too, for example issues with analysis or measurement errors that have led to incorrect results. It should be noted that retractions are not appropriate if a correction is sufficient to address the issues under consideration.

#### Removals

<u>Removals</u><sup>162</sup> are issued in very rare circumstances, where an issue cannot be resolved via any of the above mechanisms. For example, an article may be removed because of legal reasons or because of the infringement of legal rights. Similarly, articles may be removed if they include materials that pose risks to study participants or protected animal or plant species.

#### Communicating concerns or changes to the Version of Record

When corrections, expressions of concern, retractions or removals take place, they need to be clearly communicated to readers. Any of these actions must be promptly flagged on the original article's webpage, to warn readers and minimise harmful effects. The text describing a correction, an expression of concern, a retraction or a removal on the journal's website should use neutral and objective language, avoiding inflammatory wording and focusing on facts.

Furthermore, article metadata should be updated and reindexed to reflect changes such as retraction or removal. <u>Crossmark</u><sup>163</sup> is a helpful way to reflect editorially significant decisions: Crossmark members commit to informing Crossref of updates such as corrections or retractions, as well as optionally providing additional metadata about editorial procedures and practices.

In all cases, article metadata should be retained (e.g. title, authors), to ensure the integrity of the scholarly record.

https://publicationethics.org/files/retraction-guidelines.pdf

 <sup>&</sup>lt;sup>161</sup> COPE. (2019). Retraction guidelines. Committee on publication ethics. <u>https://doi.org/10.24318/cope.2019.1.4</u>
 <sup>162</sup> COPE. (2019). Retraction guidelines. Committee on publication ethics.

<sup>&</sup>lt;sup>163</sup> Crossref. (n.d.). Crossmark. <u>https://www.crossref.org/services/crossmark/</u>



## Infrastructure

### Software and technical infrastructure

Topic leads: Chris Hartgerink, Andrea Chiarelli

To successfully run an online journal, it is important to consider software, hosting and integration needs. Based on time, skills and resources available, journals can choose among a range of software options, from self-hosting - the most tailored solution - to the use of software packages that enable the creation of a journal on existing infrastructure. Importantly, the choice of software affects integration needs, so careful consideration is needed.

Many open access journals run on open source software. This software is freely available online and needs to be installed on a suitable server to be run. Examples of leading solutions to manage open access journals and the article submission system include <u>the Open Journal Systems<sup>164</sup></u>, <u>Kotahi<sup>165</sup></u> and <u>Janeway</u>.<sup>166</sup> These solutions can also help with production and typesetting: for instance, Kotahi allows its users to export manuscripts in <u>JATS XML format</u>, as well as to PDF or HTML.

There can be a distinction between the back-end and the front-end of journal websites. The back-end contains all the databases and information pertaining to the articles (and submissions), whereas the front-end is about the reader and the author's experience of the journal (what people see as you browse the website or submission portal). The Open Journal Systems is a full service piece of software, covering both back-end and front-end, whereas Kotahi is for the back-end and the handling of submissions only.

Choosing the right software for an online journal is critical, as migrating from one to the other can be complicated once a journal has built up a portfolio. Some journals like the Journal for Open Source Software choose to build their own custom software; this is only recommended if the right mix of financial and technical resources are available.

Journals also need to make appropriate decisions in terms of hosting and technical integrations, as these affect the features of the website as well as its ability to communicate with other scholarly communication infrastructures.

#### Hosting

Although software for creating an open access journal may be freely available, this needs to be run on a computer (i.e. a server). Journals may choose to self-host the

<sup>&</sup>lt;sup>164</sup> Public Knowledge Project. (n.d.). Open Journal Systems. <u>https://pkp.sfu.ca/software/ojs/</u>

<sup>&</sup>lt;sup>165</sup> Kotahi. (n.d.). Kotahi. <u>https://kotahi.community/</u>

<sup>&</sup>lt;sup>166</sup> Janeway. (n.d.). Home. <u>https://janeway.systems/</u>



software using server providers such as <u>Amazon Web Services</u>,<sup>167</sup> <u>Microsoft Azure</u>,<sup>168</sup> or <u>Google Cloud Platform</u>.<sup>169</sup> Self-hosting means that journals are responsible for software updates and other maintenance to keep the journal running smoothly. Otherwise, there is an option to buy hosted software as a service. In this case, journals do not need to get involved in server maintenance. If financial resources are available, but technical resources or time might be lacking, hosted software as a service is an effective solution.<u>The Open Journals System</u><sup>170</sup> and <u>Janeway</u><sup>171</sup> offer hosting services of this kind.

Sometimes, software and hosting come as a combined package. This means that the journal's ability to influence technical features is more limited, but software management is even more streamlined. An example of this option is <u>PubPub</u>,<sup>172</sup> which allows the creation of journals within their system.

### Integrations

Journals will need to integrate with other technical infrastructures, mainly to exchange metadata. This helps embed journals in public databases and maximise its visibility. Potential integrations that most journals need to consider include:

- <u>Crossref</u><sup>173</sup>or<u>DataCite</u>,<sup>174</sup> to register DOIs
- ORCID,<sup>175</sup> to allow authors to log in more easily
- <u>Research Organization Registry</u>,<sup>176</sup> to include organisational identifiers

The technical infrastructures and integrations available to each journal may be limited by the software choice. It is crucial to identify what the needs of each journal are before selecting the software: some options allow for plugins (e.g. the Open Journal System) and may be more adaptable to user needs and future landscape changes.

<sup>&</sup>lt;sup>167</sup> Amazon Web Services. (n.d.). Amazon web services. <u>https://aws.amazon.com/</u>

<sup>&</sup>lt;sup>168</sup> Microsoft. (n.d.). Microsoft Azure. <u>https://azure.microsoft.com/en-us</u>

<sup>&</sup>lt;sup>169</sup> Google. (n.d.). Google cloud platform. <u>https://cloud.google.com/</u>

<sup>&</sup>lt;sup>170</sup> Public Knowledge Project. (n.d.). OJS Journal Hosting. <u>https://pkp.sfu.ca/hosting-services/hosting/journals/</u>

<sup>&</sup>lt;sup>171</sup> Janeway. (n.d.). Hosting. <u>https://janeway.systems/hosting</u>.

<sup>&</sup>lt;sup>172</sup> PubPub. (n.d.). PubPub. <u>https://www.pubpub.org/</u>

<sup>&</sup>lt;sup>173</sup> Crossref. (n.d.). Crossref. <u>https://www.crossref.org/</u>

<sup>&</sup>lt;sup>174</sup> Datacite. (n.d.). Datacite. <u>https://datacite.org/</u>

<sup>&</sup>lt;sup>175</sup> ORCID. (n.d.). ORCID. <u>https://orcid.org/</u>

<sup>&</sup>lt;sup>176</sup> Research Organisation Registry. (n.d.). ROR. <u>https://ror.org/</u>



### Journal appearance and web design

Topic leads: Chris Hartgerink, Andrea Chiarelli

Journals, like any other website, should be presented using an appealing and user-friendly design. Considering whether information as well as published articles are easy to find and understand, accessible and easy to use will affect whether people read the journal and consider submitting articles.

A journal's website, called the front-end, is where authors and readers will make first contact. It is important to make sure that the website is carefully curated to convey a chosen set of messages. Importantly, journals may be bound by institutional requirements (e.g. if the journal is hosted by the institution) and might need to comply with external or existing standards.

#### Sitemap

Journal websites need to provide a large amount of information, including the scope, aims and focus, editorial policies, individual articles and more. It is important to create a logical structure for this content, to make it easy to find relevant information. Creating and brainstorming a sitemap on paper can help design the website's navigation bar and organise information. For example, what are the different elements you want readers and authors to be able to find at a glance? It may be helpful to consider looking at well-established journals in similar fields to make this process easier.

### Accessibility

A website's accessibility is defined in the <u>Web Accessibility Standards</u>.<sup>177</sup> The web standards are defined as A, AA, or AAA, with the latter being the most accessible. It is recommended to always aim for AA standard as a minimum, to ensure journal websites are accessible to diverse sets of authors and readers. Certain areas also have laws around minimum accessibility standards, so you should check whether this applies to you.

Basic accessibility practices include:

- Using alternative text for figures
- Ensuring that the colour palette has sufficient <u>contrast</u><sup>178</sup> (no black text on dark backgrounds)
- Including meaningful links across the website
- Not relying solely on colour to convey information

<sup>&</sup>lt;sup>177</sup> Web Accessibility Initative. (n.d.). How to Meet WCAG (Quick Reference). <u>Web Content Accessibility Guidelines (WCAG)</u> <u>2 requirements</u>

<sup>&</sup>lt;sup>178</sup> WebAIM. (n.d.). Contrast checker. <u>https://webaim.org/resources/contrastchecker/</u>



More generic accessibility principles also apply to journal websites, mainly in terms of how easy it is for intended users to understand the contents or materials presented. For example, it is highly recommended to use clear language and to avoid jargon where possible.

#### **User experience**

In designing a website, it is easy to assume what our users want and need, particularly when the website is being developed by non-expert volunteers. It is therefore important to reach out to readers and authors to test journal websites, ideally prior to their release. User testing sessions may include tree testing or card sorting exercises, and it is often helpful to ask testers to verbalise their positive and negative experiences in using the website.

When it comes to the pages hosting published articles, journals should ensure that all key information is easy to find (e.g. <u>author guidelines</u>, <u>editorial policies</u>). This would include at least the article's title, authors, affiliations, a persistent identifier and a licence. Additionally, journals should ensure that the font size as well as headings, figures and tables are appropriately formatted in both desktop and mobile versions of the website, to maximise readability and minimise end-user frustrations. It may also be helpful to provide download buttons, if appropriate, for example for a pdf version of the article, as well as article metrics. These are often displayed on the side of the article, but it is recommended that journals in neighbouring fields are checked to assess likely user expectations.



### Article and journal metadata

Topic leads: Andy Byers, Ivonne Lujano

Article and journal metadata play an important role in scholarly communication by providing information about a publication and its content. Metadata allows researchers to locate and select resources and helps publishers and indexing organisations to categorise and include works in their databases and search engines.

<u>Metadata</u><sup>179</sup> is data that provides information about other data. In scholarly publishing, metadata refers to structured information that describes the attributes of an article, including its title, authors, date of publication, copyright and licensing status, and more.

Metadata should be created following appropriate standards and it is commonly deposited via Crossref (article metadata), DataCite (metadata on other research objects such as data, software and more) or indexes (journal metadata). Journals have a responsibility to make their metadata easily available, so that any contents published are discoverable by readers via a broad range of search approaches.

#### Metadata standards

It is important to provide a common structure for metadata, so that it can be digitally read and automatically presented to users. Metadata standards promote interoperability, by helping ensure that records remain accurate and consistent.

Using metadata standards also enables and promotes development indexing and discovery services, particularly when in combination with <u>persistent identifiers</u> for articles (e.g. digital object identifiers, permalinks), authors (<u>ORCID</u>)<sup>180</sup> and organisations (e.g. <u>Research Organization Registry</u>).<sup>181</sup>

Some notable metadata standards include <u>Dublin Core</u>,<sup>182</sup> <u>Machine Readable</u> <u>Cataloging (MARC)</u>,<sup>183</sup> <u>Crossref</u><sup>184</sup> and <u>DataCite</u>.<sup>185</sup> Whilst <u>JATS</u><sup>186</sup> is primarily a format for storing the entire article (see <u>Structured content</u>), it is also used as a metadata interchange format between publishers and archivists

<sup>185</sup> DataCite Schema. (2021, March 30). DataCite Metadata Schema. <u>https://schema.datacite.org/</u>

<sup>&</sup>lt;sup>179</sup> Merriam Webster. (n.d.). Metadata.

https://web.archive.org/web/20150227084709/http://www.merriam-webster.com/dictionary/metadata <sup>180</sup> ORCID. (n.d.). About ORCID. <u>https://info.orcid.org/what-is-orcid/</u>

<sup>&</sup>lt;sup>181</sup> ROR. (n.d.). Home. <u>https://ror.org</u>

<sup>&</sup>lt;sup>182</sup> Dublin Core. (n.d.). Dublin Core. <u>https://www.dublincore.org/specifications/dublin-core/</u>

<sup>&</sup>lt;sup>183</sup> Library of Congress. (2009). WHAT IS A MARC RECORD, AND WHY IS IT IMPORTANT?.

https://www.loc.gov/marc/umb/um01to06.html

<sup>&</sup>lt;sup>184</sup> Crossref. (2021, October 22). Metadata principles and practices.

https://www.crossref.org/documentation/principles-practices/

<sup>&</sup>lt;sup>186</sup> National Center for Biotechnology Information, U.S. National Library of Medicine. (n.d.). Journal Article Tagging Suite (JATS). <u>https://jats.nlm.nih.gov/</u>



Typical differences between article and journal metadata are noted in the following table.

Focus of the metadata	Typical fields		
Article	<ul> <li>Title</li> <li>Author(s), including for example first name, middle name, last name, ORCID, CREDIT, institutional affiliation</li> <li>Date of Publication</li> <li>Volume/Issue details</li> <li>Page Numbers</li> <li>Abstract</li> <li>Keywords</li> <li>Digital Object Identifier</li> <li>Funding Metadata</li> <li>References</li> </ul>		
Journal	<ul> <li>Journal title</li> <li>Journal abbreviation</li> <li>ISSN</li> <li>Article types/sections</li> <li>Copyright information</li> <li>Publisher</li> </ul>		

# Making article metadata available to readers and discovery platforms

Journals typically have clear metadata displayed alongside individual articles. This helps readers identify the title of the article, its author(s), publication data and persistent identifier, for example. If the journal publishes JATS XML versions of the article, this can be used to supply metadata in a structured form, which can be helpful for <u>text and data mining</u>.<sup>187</sup> Metadata can also be embedded in pdf documents, using the <u>Extensible Metadata Platform</u>.<sup>188</sup>

Most publishing systems (e.g. <u>Open Journals System</u>,<sup>189</sup> <u>Janeway</u>)<sup>190</sup> will make Dublin Core metadata available on the article's abstract page, so that it can be read by

https://en.wikipedia.org/wiki/Extensible\_Metadata\_Platform

 <sup>&</sup>lt;sup>187</sup> Padula, D. (2019, August 22). Journal indexing: core standards and why they matter. LSE blog.
 <u>https://blogs.lse.ac.uk/impactofsocialsciences/2019/08/22/journal-indexing-core-standards-and-why-they-matter/</u>
 <sup>188</sup> Wikipedia. (2023, March 21). Extensible Metadata Platform.

<sup>&</sup>lt;sup>189</sup> Open Journal Systems. (n.d.). Open Journal Systems. <u>https://openjournalsystems.com/</u>

<sup>&</sup>lt;sup>190</sup> Janeway. (n.d.). Janeway. <u>https://janeway.systems/</u>



referencing tools (e.g. <u>Zotero</u>),<sup>191</sup> and will provide an <u>Open Access Initiative Protocol for</u> <u>Metadata Harvesting (OAI-PMH)</u><sup>192</sup> feed for metadata harvesting.

<sup>&</sup>lt;sup>191</sup> Zotero. (n.d.). Zotero. <u>https://www.zotero.org/</u>

<sup>&</sup>lt;sup>192</sup> Open archives initiative. (n.d.). Protocol for Metadata Harvesting. <u>https://www.openarchives.org/pmh/</u>



### Structured content

Topic lead: Andy Byers, Alex Mendonça

Structured content has become increasingly important in scholarly communication, as it provides a standard and machine-readable format for organising and exchanging information. The XML format is widely used by publishers and is based on producing articles where each element is carefully tagged based on a standard vocabulary.

Structured content is information or data that is organised in a predictable way. There are various formats for structured content, the most notable are <u>XML</u><sup>193</sup> (Extensible Markup Language), <u>JSON</u><sup>194</sup> (JavaScript Object Notation) and <u>YAML</u><sup>195</sup> (YAML Ain't Markup Language).

XML <u>is used widely in academic book and journal publishing</u>.<sup>196</sup> It makes scholarly content layout-independent, more flexible and reusable for a variety of formats (e.g. pdf, HTML, EPUB). It also offers improved searchability, accessibility and preservation, and allows text mining. Humanities scholars have traditionally used TEI (Text Encoding Initiative) XML, while publishers increasingly use the <u>NISO standard JATS</u><sup>197</sup> (Journal Article Tag Suite) and its extension <u>BITS</u><sup>198</sup> (Book Interchange Tag Suite). XML can be introduced at different stages of the production process, with XML-first, XML-last and XML-middle workflows.

Commercial publishers typically outsource the production of XML or use specialist software, which may not always be an option for small-scale open access journals with limited funds. Notably, Kotahi is an open source solution that includes JATS XML exporting features.<sup>199</sup> However, we note that technical skills are required for its installation.

### XML in journal production

The XML format uses machine readable tagging. The most important feature of XML tags is that the tagging is semantic:<sup>200</sup> for example, an article's title will effectively be

<sup>195</sup> YAML. (n.d.). YAML. <u>https://yaml.org/</u>

<sup>199</sup> Kotahi. (n.d.). Features. <u>https://kotahi.community/features/</u>

<sup>200</sup> Aries systems. (2020, November 12). The Benefits of an XML-First Publishing Workflow. https://www.ariessys.com/blog/the-benefits-of-an-xml-first-publishing-workflow/

<sup>&</sup>lt;sup>193</sup> XML. (n.d.). Focus Area News. <u>https://www.xml.org/</u>

<sup>&</sup>lt;sup>194</sup> JSON. (n.d.). Introducing JSON. <u>https://www.json.org/json-en.html</u>

<sup>&</sup>lt;sup>196</sup> The University of Edinburgh. (2019). Support for XML-based publishing in OJS.

https://www.ed.ac.uk/files/atoms/files/xml\_publishing\_in\_ojs - project\_summary\_user\_guide\_0.pdf <sup>197</sup> NISO. (2019). ANSI/NISO Z39.96-2019, JATS: Journal Article Tag Suite, version 1.2. https://www.niso.org/publications/z3996-2019-jats

<sup>&</sup>lt;sup>198</sup> JATS, (n.d.). Book Interchange Tag Set: JATS Extension. National Center for Biotechnology Information (NCBI), U.S. National Library of Medicine.<u>https://jats.nlm.nih.gov/extensions/bits/</u>



tagged as the title - not only as text as typically done in HTML. XML can also cover other metadata, including authors, funding information, the publication date and more.

The advantage of an XML-first approach is that, from the time of submission, manuscripts can be tagged and edited in a structured format, reducing frustrations that may arise when annotating different versions of pdf or Word documents. Structured XML documents are also easier to analyse via artificial intelligence and automated checking tools, with potential time savings throughout the publication workflow.

Later down the line, when an article is published, the use of XML can give rise to benefits in terms of accessibility and discoverability. Structured documents can be easily indexed by search engines, and their automated analysis can be considered by researchers. Structured documents are also <u>well suited to screen readers</u>,<sup>201</sup> thus making it easier for blind individuals, partially-sighted users or those with reading disorders.

### **Disadvantages of XML**

Using XML is more complex than 'basic' pdf or HTML publishing, and one of its primary disadvantages is the learning curve required to effectively implement it. This challenge will particularly affect smaller publishers who do not have technical resources in-house nor have the budget to outsource XML production. The other disadvantage of XML is that it is time consuming to apply, which might further discourage new journals.

As a result, many smaller publishers prefer to work with pdf or <u>HTML<sup>202</sup></u> formats. Should a journal choose to pursue this approach, it is essential to make articles as accessible as possible in line with the time and resources available.

 <sup>&</sup>lt;sup>201</sup> Access Computing. (n.d.). Is XML accessible? University of Washington.
 <u>https://www.washington.edu/accesscomputing/xml-accessible</u>
 <sup>202</sup> Github. (n.d.). Scholarly HTML. <u>https://w3c.github.io/scholarly-html/</u>



### **Persistent Identifiers**

Topic lead: Andy Byers, Alex Mendonça

Persistent identifiers are used to permanently identify scholarly outputs, ensure stable access to them, reduce ambiguity where article titles may be similar and overcome challenges encountered where references are inaccurate. There are a variety of different persistent identifiers, but Digital Object Identifiers (DOIs) are the most widely adopted in scholarly communication.

As research has moved from predominantly paper based to predominantly digital, the ways in which outputs are found, cited and archived have changed. Internet searches and persistent identifiers have replaced the requirement for meticulous referencing via journal volumes, issues and pagination.

### Types of persistent identifiers

A persistent identifier is a permanent, unique reference to a digital resource. There are a variety of persistent identifiers such as <u>Digital Object Identifiers</u><sup>203</sup> (DOIs), <u>International Standard Book Numbers</u><sup>204</sup> (ISBNs), <u>International Standard Serial</u> <u>Numbers</u><sup>205</sup> (ISSNs), <u>handles</u>,<sup>206</sup><u>Archival Resource Keys</u><sup>207</sup>(ARKs) and <u>Persistent Uniform</u> <u>Resource Locators</u><sup>208</sup> (PURLs). Each of these covers a different type of digital resource, with the Digital Object Identifier being most commonly used to identify individual articles and various other research objects (e.g. research data).

Other types of persistent identifiers can also be helpful:

- <u>ORCID</u><sup>209</sup> is used to uniquely identify authors and overcome challenges such as author ambiguity from duplicate names, name changes through marriage or authors moving institutions.
- <u>ROR<sup>210</sup> is used for identifying institutions and organisations.</u>
- <u>Grant DOIs<sup>211</sup></u> are used to track the outputs connected to the research supported by a grant

https://en.wikipedia.org/wiki/Archival\_Resource\_Key

<sup>&</sup>lt;sup>203</sup> DOI. (n.d.). *Home page*. <u>https://www.doi.org/</u>

<sup>&</sup>lt;sup>204</sup> International Standard Book Numbers (n.d). *The International ISBN agency*. <u>https://www.isbn-international.org/</u>

<sup>&</sup>lt;sup>205</sup> nternational Standard Serial Number International Centre. (n.d.). *What is an ISSN?* <u>https://www.issn.org/understanding-the-issn/what-is-an-issn/</u>

 <sup>&</sup>lt;sup>206</sup> Wikipedia. (2023, April 18). *Handle System*. <u>https://en.wikipedia.org/wiki/Handle\_System</u>
 <sup>207</sup> Wikipedia. (2023, May 15). *Archival Resource Key*.

<sup>&</sup>lt;sup>208</sup> Wikipedia. (2023, May 14). *Persistent uniform resource locator.* 

https://en.wikipedia.org/wiki/Persistent\_uniform\_resource\_locator

<sup>&</sup>lt;sup>209</sup> ORCID. (n.d.). About ORCID. <u>https://info.orcid.org/what-is-orcid/</u>

<sup>&</sup>lt;sup>210</sup> ROR. (n.d.). Home. https://ror.org

<sup>&</sup>lt;sup>211</sup> Crossref. (n.d.). *Introduction to grants*.

https://www.crossref.org/documentation/research-nexus/grants/



• <u>Research activity identifiers</u><sup>212</sup> (RAiD) are used to identify research projects, their members and tools being used.

### The role of Digital Object Identifiers

The Digital Object Identifier is a system developed by the International DOI Foundation for identifying and linking to digital content. Digital Object Identifiers are used by organisations such as publishers and libraries to enable persistent access to digital content, overcoming the challenges associated with links which can change or become broken over time. The development and usage of Digital Object Identifiers has <u>made it</u> <u>easier to access and cite digital research</u><sup>213</sup> as well as to preserve articles and track citations.

There are a number of different Digital Object Identifier registration agencies. Registration agencies facilitate Digital Object Identifier registration, metadata deposit and citation information. The registration agencies also ensure that publishers adhere to industry standards (e.g. digital preservation) and that their Digital Object Identifiers continue to resolve properly. Most agencies charge a membership fee per year and then charge for each Digital Object Identifier deposited. Examples of registration agencies include:<sup>214</sup>

- Crossref, a non-profit membership agency
- DataCite, a non-profit agency providing Digital Object I registry for research data
- mEDRA, is the multilingual European Registration Agency
- ISTIC, is a Chinese DOI registration agency
- Japan Link Center, is a Japanese DOI registration agency

#### How are DOIs structured?

Digital Object Identifiers are made up of two sections, a prefix and a suffix, which are separated by a forward slash. They are case-insensitive and can be made up of any Unicode character, though agencies <u>may limit</u><sup>215</sup> which character they allow. The prefix identifies an organisation, in our use case usually a publisher, and the suffix identifies the article. Different Digital Object Identifiers registration agencies mandate how the suffix should be formatted.

By clicking on a DOI link, users are redirected to a chosen URL on the publisher's website. Although this URL may vary in time, the DOI is expected to retain its connection to the target content (i.e. the article).

<sup>&</sup>lt;sup>212</sup> RAid. (n.d.). Research Activity Identifier. <u>https://www.raid.org.au/</u>

<sup>&</sup>lt;sup>213</sup> DOI. (2015). DOI Handbook INTRODUCTION. <u>https://www.doi.org/the-identifier/resources/handbook/1\_introduction</u>

 <sup>&</sup>lt;sup>214</sup> DOI. (n.d.). Existing Registration Agencies. <u>https://www.doi.org/the-community/existing-registration-agencies/</u>
 <sup>215</sup> Crossref. (2021). Guidelines for creating a DOI suffix.

https://www.crossref.org/documentation/member-setup/constructing-your-dois/#00007



## About the Open Access Journals Toolkit

### About

Topic lead: Lucia Loffreda, Andrea Chiarelli

The Open Access Journals Toolkit is a freely accessible resource providing guidance and further reading materials to support new and established open access journals in navigating the rapidly changing landscape of open access publishing. The Open Access Journals Toolkit covers topics across the journal development lifecycle and everyday operation, such as journal creation, costs, staffing, policy development, through to indexing and key technical aspects.

The Open Access Journals Toolkit provides information across a range of topics related to open access journals. Topics are organised according to the following six sections:

- Getting started
- Running a journal
- Indexing
- Staffing
- Policies
- Infrastructure

The Open Access Journals Toolkit has been designed to support a range of users including publishers, editors, authors, technical providers, reviewers, researchers, and librarians, with the tools needed to support a range of regional initiatives and publishing efforts.

### A brief history of the Toolkit

In 2022, the Directory of Open Access Journals (DOAJ) and the Open Access Scholarly Publishing Association (OASPA) held a consultation with a group of international open access experts, journal managers and editors, with support from Research Consulting. This investigative work looked into the potential need for an online resource to support new and established open access journals in navigating the rapidly changing landscape of open access publishing. A majority of contributors agreed that this would be a valuable asset, and helped define the early shape of the Open Access Journals Toolkit.

Following the initial consultation, DOAJ and OASPA set out to fully scope out and develop the Open Access Journals Toolkit. This included the formation of a diverse Editorial Board (see below) and the preparation of all contents available today, as well as web and branding design and content architecture testing. The Open Access Journals Toolkit design process began in November 2022 and ended in June 2023, when the website went live.



The Open Access Journals Toolkit will continue to be updated by the Editorial Board as the open access publishing landscape develops, and any changes and updates will be highlighted on relevant pages and reflected in the downloadable version of the Open Access Journals Toolkit.

### **Our Editorial Board**

DOAJ and OASPA are very grateful for the ongoing support provided by the Editorial Board in keeping the Open Access Journals Toolkit up to date. We recognise the input and insights provided by the following experts representing a range of languages, territories, roles and organisations:

- Alex Mendonça, Scielo
- Andy Byers, Open Library of Humanities, Birkbeck
- Andy Nobes, INASP
- Chris Hartgerink, Liberate Science GmbH
- Clarissa França Dias Carneiro, Berlin Institute of Health (BIH)
- Ivonne Lujano, Directory of Open Access Journals (DOAJ)
- Katie Foxall, ecancer
- Rebecca Wojturska, University of Edinburgh
- Solange Santos, Scielo
- Susan Murray, African Journals OnLine (AJOL)
- Tom Olijhoek, Directory of Open Access Journals (DOAJ)
- Wendy Patterson, Beilstein-Institut

We acknowledge that an annual honorarium is made available to Editorial Board Members for their input.

To support the Board, we welcome suggestions for articles and resources that could be added as well as for updates to the contents of the Open Access Journals Toolkit. To suggest a resource or update, please contact <u>editorialboard@oajournals-toolkit.org</u>.

We are not currently looking for additional Editorial Board members, but do let us know if you might be interested and we will highlight any future opportunities.

#### Contact us

To get in touch for anything other than content suggestions or updates, please contact <u>helpdesk@oajournals-toolkit.org</u>.

#### Acknowledgements

DOAJ and OASPA gratefully acknowledge the support provided by the <u>Research</u> <u>Consulting</u> team (Lucia Loffreda, Andrea Chiarelli, Elle Malcolmson, Frances Palmer, Ellie Cox, Rob Johnson) in managing the Open Access Journals Toolkit design and implementation process, as well as the work done by <u>Studio Seventeen</u> (Gareth Roberts, Chloe Morris, Ed Walsh) in building and maintaining the website.



All toolkit contents have been proposed, curated and drafted by Editorial Board Members. We acknowledge that AI-based tools have been used in the copyediting process alongside extensive human editing, to ensure consistency in readability, presentation and coverage of topics.



### What is an open access journal?

Topic lead: Elle Malcolmson, Tom Olijhoek

An open access journal is a scholarly journal that provides free and unrestricted access to its content. Open access journals are available online and apply permissive reuse licences to the articles they publish. These journals may or may not charge submitting authors, based on their business model.

Open access journals are scholarly publications that are made freely available online to anyone with an internet connection. They provide a platform for researchers to share their findings and discoveries with the world, without any financial or legal barriers. Most often, open access articles make use of <u>Creative Commons licences</u>.<sup>216</sup>

Open access journals are typically peer-reviewed and published in a range of disciplines, from the life sciences to the humanities. They may be fully free to both authors and readers (diamond open access journals) or free to readers upon the payment of an article processing charge by the author, their institution or funder (gold open access journals). By making research freely available, open access journals help to ensure that knowledge is shared and disseminated widely.

Alongside fully open access journals, there are other forms of open access that make this landscape somewhat difficult to navigate. These are summarised in the table below, alongside some key features and whether the route can be considered as an open access journal:

Route	Key features	Author pays?	Reader pays?	Open access journal?
Diamond	<ul> <li>The journal does not charge authors nor readers</li> <li>Funding to run the journal must be secured from other sources</li> <li>Copyright is retained by the author, and the article is shared with a permissive licence for reuse</li> </ul>	No	No	Yes
APC gold	• Authors pay an article processing charge (APC) to	Yes	No	Yes

<sup>&</sup>lt;sup>216</sup> Creative Commons. (n.d.). About CC Licences. <u>https://creativecommons.org/about/cclicenses/</u>



Route	Key features	Author pays?	Reader pays?	Open access journal?
	<ul> <li>make their work available via open access</li> <li>Waivers may be made available for authors in lowand middle-income countries</li> <li>The whole journal is available via open access</li> <li>Copyright is retained by the author, and the article is shared with a permissive licence for reuse</li> </ul>			
Hybrid	<ul> <li>Authors pay an article processing charge (APC) to make their work available via open access</li> <li>Waivers may be made available for authors in lowand middle-income countries</li> <li>Only articles where the author has paid an article processing charge are available via open access while the remainder of the journal is behind a paywall</li> <li>Copyright is retained by the author, and the article is shared with a permissive licence for reuse</li> </ul>	Yes	Only open access articles in a hybrid journal are free to read and reuse	No
Green	<ul> <li>The accepted manuscript prior to typesetting is uploaded to an institutional repository</li> <li>The published version of record remains paywalled and available via subscription or direct purchase</li> <li>Copyright may be retained by the author; reuse rights may be limited</li> </ul>	No	No	No



Route	Key features	Author pays?	Reader pays?	Open access journal?
	<ul> <li>An embargo period may be applied</li> <li>Gold or diamond open access articles may also be uploaded to institutional repositories</li> </ul>			
Bronze	<ul> <li>The article is made available to read freely by the publisher</li> <li>Access to the output can be revoked</li> <li>There are typically limited or no reuse rights</li> </ul>	No	No	No
Subscripti on	<ul> <li>Traditional form of scholarly publishing, for which published content is paywalled and organisations must purchase a subscription or buy individual research outputs</li> <li>Copyright is transferred to the publisher by the author</li> </ul>	No	Yes	No

It should be noted that many do not consider bronze as being open access, as articles made available via this route are not permanently and irrevocably available to reuse and access online. This also highlights the important difference between free to read (i.e. bronze) and open access content: the former is simply free to access online, with no possibility to reproduce, sell or modify that content, while the latter comes with permissive reuse rights, too.



### Frequently asked questions

Topic leads: Lucia Loffreda, Tom Olijhoek

This page includes answers to Frequently Asked Questions about the Open Access Journals Toolkit. To view the answers and get links to the relevant sections of the Open Access Journals Toolkit, click on the questions which will expand.

Included below are answers to some Frequently Asked Questions about the Open Access Journals Toolkit. If there is something you would like to know that is not covered below then you can contact the Open Access Journals Toolkit via helpdesk@oajournals-toolkit.org.

### How do I navigate the Open Access Journals Toolkit?

The pages of the Open Access Journals Toolkit have been arranged according to a typical lifecycle for developing and managing an open access journal. To easily navigate the Open Access Journals Toolkit, use the bar at the top of the website or from a mobile device use the menu icon in the top right corner.

### How do I change the language of the Open Access Journals Toolkit?

The language that the Open Access Journals Toolkit is displayed in can be changed using the icon in the top right of the Open Access Journals Toolkit pages. The language selected will then be displayed on all pages on the Open Access Journals Toolkit. The Open Access Journals Toolkit will be available in all United Nations languages as a starting point, including Arabic, Chinese, English, French, Russian and Spanish.

### Can I download the Open Access Journals Toolkit?

Yes, you can download the entire Open Access Journals Toolkit via the link in the website footer or by clicking <u>here</u>. It is also possible to download individual pages of the Open Access Journals Toolkit by clicking the pdf icon. The Open Access Journals Toolkit will be downloaded in pdf format and will include a table of contents for easy navigation.

### Can I reference the Open Access Journals Toolkit or Open Access Journals Toolkit pages in my own work?

Yes, the toolkit is available via a <u>Creative Commons Attribution (CC BY) licence</u> and you can reference it in your own work using this recommended citation: 'OASPA and DOAJ. (2023). Open Access Journals Toolkit. Available at: <u>oajournals-toolkit.org</u>. Each page of the Open Access Journals Toolkit has a DOI (indicated at the top of the page) which can be included when referencing specific pages of the Open Access Journals Toolkit.



# Can I reuse the text in the Open Access Journals Toolkit or images on this website?

Yes, the entire Open Access Journals Toolkit, including the content, text and images, is available via a Creative Commons Attribution (CC BY) licence. All content can therefore be copied, distributed and adapted provided that you adhere to our logo reuse guidelines and cite the relevant authors of the Open Access Journals Toolkit.

### Can I use the logo and style of the Open Access Journals Toolkit?

Yes, the style guide is available to download via the <u>Toolkit's Zenodo community</u> and includes information on the use of our logo, fonts and colours. When you use the Open Access Journals Toolkit logo, you should ensure that you follow our logo usage guidelines in the style guide.

### Can I suggest resources to add to the Open Access Journals Toolkit?

Yes, anyone can suggest resources to add to the Open Access Journals Toolkit by sending the resources via email to <u>editorialboard@oajournals-toolkit.com</u>.

### Can I note corrections or inaccuracies in the Open Access Journals Toolkit?

Yes, if you spot an error in the Open Access Journals Toolkit content, please let us know via email at <u>editorialboard@oajournals-toolkit.com</u>. In your email, please include a link to the page that contains the issues and state clearly what the issue is, ideally with a suggested correction. The Editorial Board will review your suggestion and, if appropriate, make an amendment.

### How frequently is the Open Access Journal Toolkit updated?

The Open Access Journals Toolkit content is reviewed every 12 months to ensure that it reflects recent developments in the open access journals landscape. The date the Open Access Journals Toolkit page content was last edited is visible at the top of each page, next to the topic lead.

### Can I join the Editorial Board?

The Open Access Journals Toolkit is not currently recruiting new Editorial Board members. If you would like to join the Editorial Board please get in touch at <u>editorialboard@oajournals.toolkit.com</u>. We will consider your request against the current needs of the Open Access Journals Toolkit and get back to you with potential next steps.

### Glossary

Topic leads: Elle Malcolmson, Wendy Patterson



This page includes a glossary of terms used within the Open Access Journals Toolkit and is relevant to open access more widely. While viewpoints may vary, these definitions are in alignment with those presented by the <u>Open Access Network</u>.

### Article processing charge

Article processing charges are publication fees charged by open access journals. Article processing charges are payable to the publisher by the author(s) or their institution/employer after the article has undergone peer review and been accepted for publication.

#### Author's accepted manuscript

The version of a scholarly output that may be substantively the same as the publisher's version but differ, for example, in terms of formatting, layout, or pagination.

### **Creative Commons licences**

The non-profit organisation <u>Creative Commons</u> has made several copyright licences, known as Creative Commons licences, freely available to the public for use. The licences are widely used and easily understandable. They also offer a high degree of flexibility by virtue of the fact that they can be assembled from four combinable licence elements:

- BY Attribution: The name of the creator must be provided and where technically possible a link to the original material and the CC licence.
- ND No Derivatives: The work may be modified, but the modified version may not be distributed.
- SA Share Alike: The work may be modified, but the modified version may be distributed only under the same licence as the original.
- NC –Non-Commercial: The material may be used only for non-commercial purposes.

### **Diamond open access**

This model, which is also known as platinum open access or diamond open access, is a variant of gold open access. Under diamond open access, journals function without article processing charges. Rather, the journal is financed from institutional funds, by funding agencies or, for example, by library consortia in which various libraries come together.

### **Embargo period**



An embargo period is a time delay after which publishers allow authors to make the full texts of their publications available to the public in a repository (green open access). The length of the embargo period is at the discretion of the publisher. In the case of journals, it is usually between 6 and 12 months, and sometimes even 24 months.

### **Funder mandate**

Funder mandates obligate grant recipients to provide open access to the published results that they fund. In some cases, funders lay down very concrete guidelines for the implementation of these guidelines.

### Gold open access

Gold open access refers to the publication of scholarly works as articles in open access journals, as open access monographs, or as contributions to open access collections or conference proceedings. As a rule, these texts undergo the same quality assurance process as closed access works, mostly in the form of peer review or editorial review.

#### Green open access

Green open access – also known as self-archiving – refers to making works published with a publisher or in a journal available to the public in a repository. It is sometimes understood to refer also to making such works available on the author's personal website. Self-archiving can take place at the same time as the publication of the content by the publisher or at a later date, and is possible for preprints and post-prints of scholarly articles, as well as for other document types, for example, monographs, research reports, and conference proceedings.

### Hybrid publishing model

Under hybrid open access models, publishers obtain revenue from two sources at the same time: from journal subscriptions and from the additional open access charges. In contrast to "genuine" open access, the entire journal is not freely accessible, but rather authors pay article processing charges (APCs) to "buy" the freedom of individual articles.

### **Open access**

The <u>Budapest Open Access</u> Initiative defines open access as follows: "By open access to this literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited."



### Repository

A repository is a document server at a university or a research institution on which scholarly materials are archived and made available to the public worldwide on a long-term basis. Two types of repositories are distinguished: institutional repositories (operated by institutions such as university libraries, other infrastructure organisations, or research organisations) and disciplinary repositories (trans-institutional, thematically bundled, e.g., for a particular discipline).

### Subscription publishing model

Traditionally, journals have been funded via subscriptions: publishers publish journals to which interested users subscribe in order to obtain access to the content. In the scholarly context, subscribers are mostly the libraries of scholarly institutions. Rising journal subscription prices in the 1990s led to what became known as the serials crisis. A counter-model to subscription is open access.

### **Transitional agreements**

In the context of open access, the term transition (or transformation) refers to the complete conversion of the scholarly publication system to open access, inter alia by converting traditional subscription journals into open access journals. Transitional agreements are therefore agreements entered between organisations and publishers which seek to transition the publishing model from a subscription publishing model to fully open access over a specified period of time.

### Version of record

The version of record, or publisher's version, is the version of a text that has already undergone peer review and been accepted for publication. It is identical with the formally published version of the work (i.e., the version published with a publisher or in a journal).



## **Further reading**

### **Getting started**

#### Scope, aims and focus

- Editor resources Taylor and Francis, (n.d.). Writing an effective aims & scope. <u>https://editorresources.taylorandfrancis.com/the-editors-role/developing-high-impact-content/effective-aims-scope/</u>
- Stranack, K. (2008). Starting a New Scholarly Journal in Africa: Types of Journals Published. Public Knowledge Project. <u>https://pkp.sfu.ca/files/AfricaNewJournal.pdf</u>

#### Choosing a title for your journal

 The Serials Section of the Association for Library Collections Technical Services, (2010, February 19). What's in a Name? Presentation Guidelines for Serial Publications. Library of Congress. <u>https://www.loc.gov/issn/whats</u>

#### Types of content accepted

- Chambers, C. D. & Tzavella, L. (2022). The past, present and future of Registered Reports. Nature human behaviour, 6, 29-42. https://doi.org/10.1038/s41562-021-01193-7
- Nundy, S., Kakar, A. & Bhutta, Z. A. (2021). How to Write an Editorial? In S. Nundy, A. Kakar & Z. A. Bhutta (Eds.) How to Practice Academic Medicine and Publish from Developing Countries? (pp. 263-266) Springer, Singapore. <u>https://doi.org/10.1007/978-981-16-5248-6\_26</u>

The following journals provide good examples of what content they accept:

- Center for Open Science. (n.d.). Registered Reports. https://www.cos.io/initiatives/registered-reports
- ecancer. (n.d.). Author Guidelines. https://ecancer.org/en/journal/author-guidelines
- Emerald Publishing. (n.d.). Applied Economic Analysis. https://www.emeraldgrouppublishing.com/journal/aea
- F1000Research. (n.d.). How to Publish. https://f1000research.com/for-authors/article-guidelines
- Frontiers. (n.d.). Article Types. https://www.frontiersin.org/journals/psychology/for-authors/article-types
- PLOS Biology. (n.d.). What We Publish. PLOS. https://journals.plos.org/plosbiology/s/what-we-publish
- Wikipedia. (2022, October 15). Technical report. https://en.wikipedia.org/wiki/Technical\_report

### Kick-off and ongoing funding



- Open Access Network. (n.d.). Business Models for Journals. <u>https://open-access.network/en/information/financing/business-models-for-journals</u>
- Rittman, M. (2018). Business Models for Open Access: How can I run a successful Open Access journal? The Association of Learned & Professional Society Publishers.

https://blog.alpsp.org/2018/07/business-models-for-open-access.html

 Russell, B. (2019). The Future of Open Access Business Models: APCs are not the only way. The Scholarly Kitchen. <u>https://scholarlykitchen.sspnet.org/2019/10/23/guest-post-the-future-of-open-a</u> <u>ccess-business-models-apcs-are-not-the-only-way/</u>

### **Disciplinary considerations**

 Nishikawa-Pacher, A., Heck, T., Schoch, K. (2022). Open Editors: A dataset of scholarly journals' editorial board positions. Research Evaluation, rvac037. <u>https://doi.org/10.1093/reseval/rvac037</u>

#### Journal setup checklist and timeline

- British Library. (n.d.). Application for an ISSN (International Standard Serial Number) for UK publications. <u>https://www.bl.uk/collection-metadata/application-for-an-issn</u>
- Cochran, A. (2016, August 04). Nuts and Bolts: The Super Long List of Things to Do When Starting a New Journal. Scholarly Kitchen. <u>https://scholarlykitchen.sspnet.org/2016/08/04/nuts-and-bolts-the-super-long-list-of-things-to-do-when-starting-a-new-journal/</u>
- Columbia University. (2019, May 21). Thinking About Starting Your Own Academic Journal?. <u>https://www.cuimc.columbia.edu/news/thinking-about-starting-your-own-acade</u> mic-journal
- COPE. (n.d.). Committee on Publication Ethics. <u>https://publicationethics.org/</u>
- Crossref. (n.d.). Crossref. <u>https://www.crossref.org/</u>
- Editor Resources Taylor and Francis. (n.d.). Writing an effective aims & scope. <u>https://editorresources.taylorandfrancis.com/the-editors-role/developing-high-impact-content/effective-aims-scope/</u>
- Eve, M. (2012). Starting an Open Access Journal: a step-by-step guide part 1. Eve. <u>https://eve.gd/2012/07/10/starting-an-open-access-journal-a-step-by-step-guide</u> <u>-part-1/</u>
- International standard serial number international centre.(2023). Requesting an ISSN. <u>https://portal.issn.org/requesting-issn</u>
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### **Running a Journal**

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