A Guide to Peer Reviewing Journal Articles
Introduction to this guide

Peer review is an integral component of publishing the best quality research. Its purpose is to:

1. Aid in the vetting and selection of research for publication, ensuring that the best work is taken forward

2. Provide suggestions for improving articles that go through review, raising the general quality of published research

The purpose of this guide is to give a practical introduction to conducting effective peer reviews, especially for those who are new to the process. While the information here is generally applicable to all journals with standard peer review practices, it’s important to ensure that you take into account any specific instructions given by the particular journal you are reviewing for.

Interested in becoming a Cambridge reviewer?

If you’re interested in reviewing journal articles for Cambridge, contact the relevant journal editor for your discipline, or email authorhub@cambridge.org.
Why peer review?

As well as contributing to the quality of the research corpus in your field, conducting peer reviews can benefit your own career as a researcher. The benefits include:

1. Learning more about the editorial process. By reviewing a paper and liaising with the editorial office, you will gain first-hand experience of the key considerations that go into the publication decision, as well as commonly recommended revisions.

2. Keeping up to date with novel research in your field. Reviewing also gives you a glimpse of emerging research in your discipline, sometimes months before it is to be published.

3. Having an opportunity to demonstrate your expertise in a field. It is becoming more common for researchers to use their review experience as evidence of their expertise when applying for funding or job applications, whether this is done informally or through validated reviewer recognition sites such as Publons.

4. Some journals are also experimenting with providing direct incentives to reviewers, such as payments, discounts on article processing charges and access to content.
Types of peer review

Peer review can be conducted in a range of ways, as listed below. The advantages and disadvantages of each generally stem from attitudes to openness: on the one hand many academics believe that reviews should be visible to all, and on the other hand it can be argued that anonymity protects the reviewer and allows a more objective, candid evaluation.

Single-blind is still the most common form, but publishers and journals are currently experimenting with other kinds of review in response to the changing needs of the academic community.

1. **Single-blind peer review**: The author does not know the identity of the reviewer, but the reviewers know the identity of the author.

2. **Double-blind peer review**: Neither author nor reviewers know the identity of the other.

3. **Open peer review**: The identities of authors and reviewers are known. In this model, reviews are also sometimes published along with the paper.

4. **Post-publication peer review**: In some models, particularly for experimental open access publishers, manuscripts are reviewed after they have been published. These reviews are most often open and published alongside the article in question.
Before you review

The following steps have usually taken place before you are asked to review an article:

- **Author submits an article to their chosen journal** using an online system, or occasionally directly to the editor.

- **The editorial office will check that the article complies with the instructions for contributors**, for example, with regards to formatting or language level, and will send it back to the author if changes are needed.

- **The handling Editor will make the decision on whether to send the paper to peer review**, based on its fit for the journal and apparent academic quality.

- **The handling Editor will find appropriate reviewers**, either by drawing on their own network, or by asking a specialist on the editorial board to suggest suitable reviewers.

- **Invitation to peer review sent out to selected reviewers.**
Writing your review

Once you receive the invitation to review, you will usually need to go through the following steps. This process is intended to describe the general basis for creating an effective review, but it can vary according to the particular requirements of the commissioning editor, or according to your own preferences.

Accepting or rejecting the invitation to review

If you receive an invitation to review, you will need to let the journal know if you are able to complete the review within the requested deadline. Consider the following questions when deciding whether to accept the invitation:

Do I have the appropriate expertise to review this article? If you are not confident of your ability to assess the article's quality, you should feel free to discuss this with the editor. It may be that you are still able to comment on specific aspects of the article, or that it is better to decline the review this time. This discussion will also help editors to target their review invitations more effectively in the future, especially if you clarify your own areas of expertise, and, where possible, provide alternative suggestions for reviewers.

Do I have any conflict of interest regarding this article or its author? Conflicts of interest include anything that might impede your ability to give an unbiased assessment of the article. By only accepting reviews that you are able to assess fairly, you are preserving the integrity of the peer review process. Do declare any potential conflict to the editor who has invited the review. If you’d like to learn more about conflicts of interest, the COPE guidelines on peer review are a good place to start.

Do I have the time to conduct this review effectively? Most review invitations will include a deadline for receipt of the review.
If you will be unable to complete the review by this deadline, you should let the editorial board know.

If you are not able to accept the invitation to review, it is best to send your response as quickly as possible so that the journal are able to find alternative reviewers. Where possible, it is also common practice to suggest alternative reviewers if you are not able to review.

1. Read journal guidelines

Some journals will issue peer review guidelines when you accept an invitation to review. These might suggest the key considerations and a recommended structure for your review. If there are guidelines, it is important to read them carefully before you start the process, and adapt your review and your considerations to suit the journal’s requirements. If you are unsure as to whether there are any particular requirements, the handing editor will be able to let you know.

2. First reading: Overview of article and contribution

On your first reading, you should be aiming to form an overall impression and understanding of the article. You may wish to make some notes on these first impressions, focusing on recent related work in the area, responding to the article’s statement of purpose, and thinking about the impact that you feel that the article might have on the general body of research in your discipline.

3. Second reading: Detailed reading

Once you have read the article once and formed a broad impression of it, you should undertake a second, more detailed reading of the article, with the aim of giving a rounded and objective evaluation. You may wish to consider the following aspects of the article:

1. The article’s contribution to the discipline
   - Does the article make a contribution to the discipline?
   - How significant is that contribution?
• Do the authors adequately explain the importance of the article in the discipline?
• Is the article a good fit for the journal in question?

2. Academic rigour and accuracy

• Is the methodology or argument used in the article sound?
• Does the article make a reasonable interpretation of the data or sources?
• Is there sufficient evidence to substantiate the article’s claims?
• Are the appropriate references cited, and are there any other references that you would recommend as essential to the article?
• Are those references cited assessed fairly by the author?
• Is the information (e.g. data, formulae, quotations, references, tables and figures) in the article accurate and correct?

3. Style and structure

• Is the structure of the article clear and well organised?
• Does the author introduce and contextualise the aims of the article effectively?
• Does the author summarise the conclusions of the article effectively?
• Is the language in the article clear and correct?
• Does the abstract accurately present the article’s aims, argument and conclusions?

Many reviewers find that it is useful to make notes related to each of these areas as they complete the first reading of the article. Using these notes, you can then complete your review by substantiating your evaluation with examples from the article.
4. Writing your review

Once you have read the article and made notes on both your broad and detailed impressions, you have the raw material for writing your review. Many reviewers choose to summarise their thoughts in the first paragraphs of the review, and then, in the second half of the review, move onto a more detailed substantiation of their recommendations, with suggestions for revisions where needed.

Your review will be guiding the editor when deciding on one of four routes, listed below:

1. **Accept without revision:** Very rarely, an article will be accepted for publication without any revisions requested.

2. **Minor revisions needed:** The article is mostly sound, but with some small changes required to the argument, interpretation of the results, or references. Minor revisions might include:
   - A small amount of editing to the language, to improve how the article’s findings or argument are communicated
   - Small additional experiments to complement the main body of the article
   - Including a small number of new citations or mentioning additional topics
   - Tweaking the interpretation of the results or evidence

   You should give a detailed assessment of those minor revisions you believe to be essential to the quality of the article.

   Suggestions for other, but non-essential, improvements to the article are also welcomed, but you should clearly differentiate these in your review from those which you consider to be essential. This will allow both editor and author(s) to prioritise your recommendations effectively.

3. **Major revisions needed:** The principle of the article is sound, but it will be necessary for large changes to be made in order to prepare it for publication. Situations in which major revisions
may be requested include:

• If the article has major structural issues that need to be rectified by significantly reorganizing the text
• If more experiments are needed to support the aims of the article
• If the argument needs to take into account a whole new topic
• If existing analysis of the data/evidence is flawed and needs to be re-worked

Your review can help to guide the major revisions needed, so do include suggestions for major revisions if you feel that they are essential for the success of the article. However, do bear in mind the fact that major revisions can cost the author(s) further time and money, so it is important to provide clear reasons for the necessity of further work, and to give an accurate assessment of whether the article will be academically sound should these revisions be made.

You should also include your recommendations for minor revisions in your review, even if you are recommending major revisions, so that the author(s) can address all of the issues with the article during the revision stage.

4. **Inappropriate:** If the article is not sound in principle or methodology, or does not make any significant contribution to the field, it may be rejected by the editor. If you believe that there are major problems with the article, it is important to give objective reasons and evidence for this. This will ensure that the editor understands your concerns when they are called upon to make a final decision, and in turn helps the author to develop their future research according to your feedback.

**Submitting your review**

Once you are confident that your review accurately reflects your professional opinion of the article, submit it to the handling editor.
by the agreed deadline. This is sometimes done through online peer review management systems, such as ScholarOne or Editorial Manager – if so, the handling editor will give you instructions on how to submit your review. Once submitted, the editor handling the submissions will read and consider your review, and will make a decision on how to progress with the article. The editor will collate the reviewers’ recommendations and send them to the author.

### Revisions

You may be called upon to review the article again once the author has had chance to make the necessary changes. In this case, it is helpful to compare your initial review against the changed article, to make sure that the changes that you proposed have been made successfully. You may also suggest additional changes, in the manner of a first review. For most articles, there will be one or two revision stages, depending on the number and nature of revisions needed.

### After you review

The final decision will be taken by the handling editor, who will collate the final comments on the revisions. If the article is accepted, the final files will be handed over by the author so that the publication process can begin.