

Providing constructive peer review and responding to it

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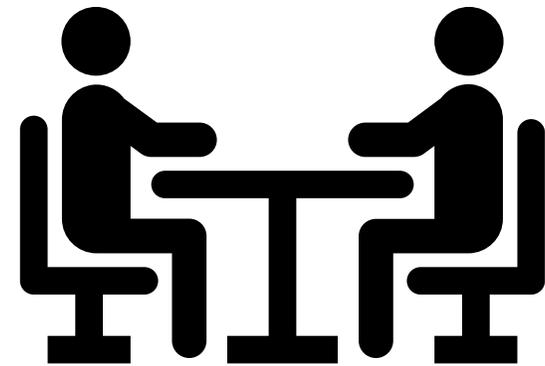
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Peer review is a dialogue

Whether you are
being a reviewer or
being reviewed,
consider the other
perspective



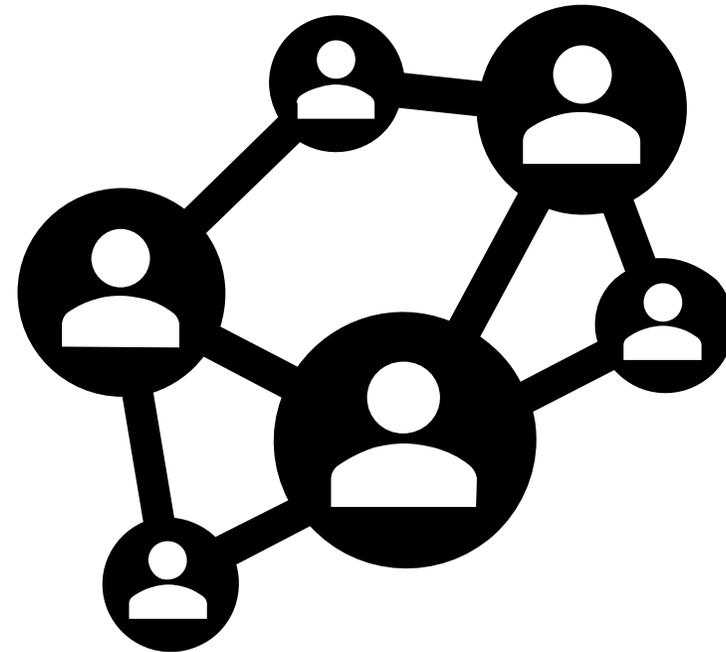
Peer review is a social activity

Informal peer review

- From colleagues in your department

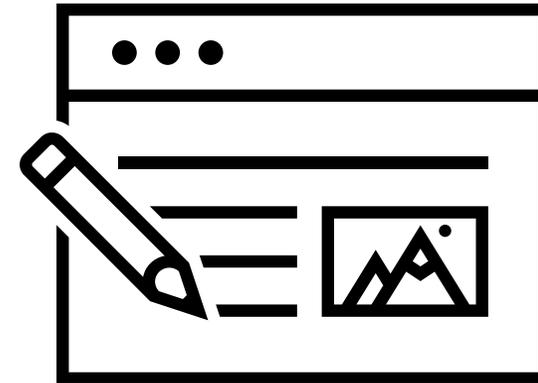
Formal (journal) peer review

- Journal staff
- Editors
- Peer reviewers



Informal peer review is helpful to get feedback on:

- article structure
- appropriate reporting
- methodological detail
- correct interpretation of results
- appropriate discussion of findings
- language
- sanity check!



The aim of informal peer review is to submit the best paper possible to a journal or conference

The aim of formal peer review is to:

- Publish a paper that accurately reflects the work that was done...
- OR
- Give authors constructive feedback that tells them why their paper does not fulfil the journal's criteria



Different concepts in journal peer review

| | | | |
|-----------------|--|--|--|
| Timing | Preprints | Pre-publication | Post-publication |
| Identifiability | Double-anonymous | Single-anonymous | Open |
| Mediation | Editors mediate all interactions between reviewers and authors | Reviewers interact with one another openly | Reviewers and authors all interact with one another openly |
| Publication | Peer reviews are not published | Peer reviews are published but not signed | Peer reviews are published and signed |
| Facilitation | Review facilitated by a journal | Review facilitated by a third party | Review facilitated by authors |
| Ownership | Review owned by a journal or third party | Review owned by the authors of the reviews | Shared or mixed ownership of reviews |

Peer review is an important professional activity



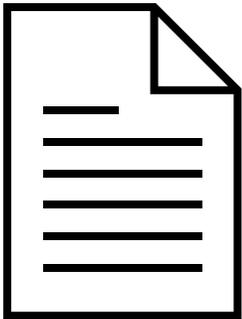
First, check you are reviewing for a reputable journal

- Do you know the journal and/or the editors?
- Would you/do you publish in the journal?
- Is it worth your time?

If yes,

- Are you qualified to do the review?
- Do you agree with the model of peer review?
- Do you have any competing interests?
- Can you do it in the time frame?

Read the editor's review request carefully

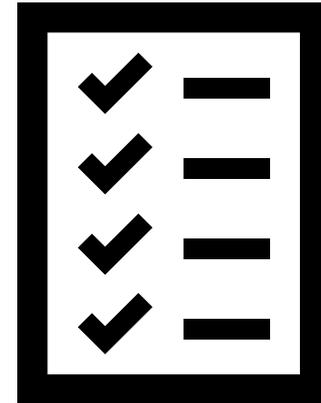


- Anything specific they want you to review?
- Check if you are expected to sign the review
- Are you asked for separate comments to editors?
- Check for competing interests (again)

Before a reviewer sees the paper

It should already have been checked to ensure:

- It is appropriate for the journal generally
- It is broadly of sufficient quality
- Ethics is documented and appropriate
- Consent is documented and appropriate
- Registration if required
- Reporting guidelines



Read the paper **once straight through**

Then read it again, first focussing on

- Methods
 - Results (including figures and tables, main and supplementary)
 - If useful, check against reporting guidelines eg CONSORT for trials
- To assess **validity**

Then focus on

- Introduction
 - Discussion
- To assess **where it fits in relation to other work**

Writing a review

Write the review in a word or google doc, **outside the review system**, (in case you lose it!). Take notes on the paper as you go through.

Start with a **summary** and your overall view

Then number **major/general points** (with page and exact ref if appropriate)

- issues with an experiment or interpretation

Then number **minor points** (with page and exact ref if appropriate)

- Reference missing, sentence that doesn't make sense

You may be asked to give comments to editors separately

- Including **recommendation** – accept /minor or major revisions needed/reject

Review of Severity of Storms in Queensland 1900-2021

Thank you for asking me to review this interesting paper on the storms in Queensland. Overall I thought the research was well done and reported, although the lack of data for SEQ seemed an unfortunate gap

Major points

1. The classification of the storms was unusual and although has been used elsewhere, was not one that I have seen used in Australia before. The authors should justify this classification.
2. Why was there no data for SEQ?

Minor Points

1. Page 4, para 3 – the area around Toowoomba seems incorrectly described
2. P5 para 8 in relation to storm drains there seems to be a missing reference

Recommendation

Accept with minor revisions

Additional comment for editors

The paper needs thorough copyediting – there are numerous typos

Do

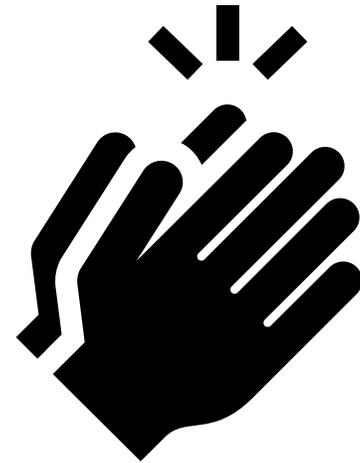
Be polite and constructive (imagine you are receiving the review)

Be accurate (if unsure of a point, say so)

Review all that you are asked to do

Give a recommendation if asked

Let the editor know ASAP if you need more time or can't complete



Don't

Be rude or sarcastic

Rewrite the paper or the project - it's their research

Copyedit, unless asked to or it is essential to understand the meaning

Share or discuss the paper with anyone else (including the author!)

unless the editor agrees

Forget to submit the review



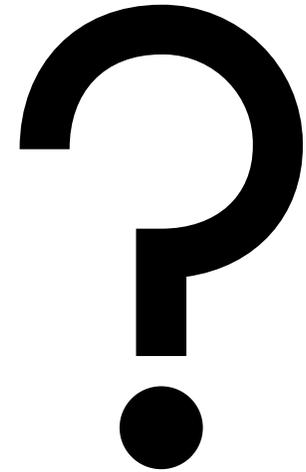
What if you find something of concern?

Examples

- Plagiarism
- Obviously fabricated data
- Unethical research

Don't continue your review as normal

- Immediately contact the editor with a neutral but factual description of what you have found
- Ask them about further steps



Responding to peer review

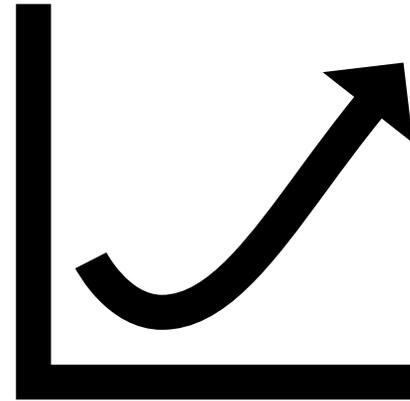
View peer review as an opportunity to improve your paper

Do

- Be polite and constructive
- Be succinct but comprehensive
- Stick to any deadlines
- Make it really easy for reviewers and editors to see how you have responded

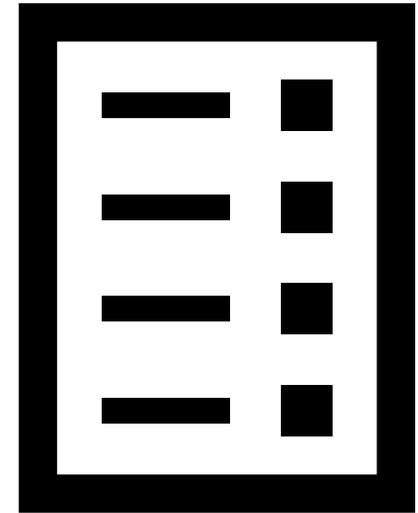
Don't

- Respond immediately
- Be unprofessional - rude, sarcastic or angry



Take a systematic approach to responding

- Let your authors know the review is back
- Have a process for collaborating on the review
- Read all the reviews and the editor's letter once through
- Reread putting the comments into a table, and begin to draft responses
- Then set the review aside for a day or so



Example table

| Review Comment | Draft response |
|---|---|
| Editor | |
| Please add a section discussing limitations | This has been added to the discussion |
| Reviewer 1 | |
| The classification of the storms was unusual and although has been used elsewhere, was not one that I have seen used in Australia before. The authors should justify this classification. | The classification was derived from a paper described by Snowman et al. We have revised the paper to describe why we chose it |
| Page 4, para 3 – the area around Toowoomba seems incorrectly described | Thank you - we have corrected the description |

When revising the paper

- Have a system for collaborating with co-authors and tracking all changes

When ready to resubmit

- Submit a cover letter that includes anything essential that is not in the specific responses
- **Submit a tracked changes version!**
- Also submit a clean version
- Keep a record of everything you submit



New models of peer review are emerging

Preprints and overlay journals

medRxiv

THE PREPRINT SERVER FOR HEALTH SCIENCES

F1000

F1000Research

eLife



A close-up photograph of a red pushpin with a black metal stem, pinned to a map. The map shows various colored lines representing roads or boundaries. The image is partially obscured by a white circular graphic on the right side of the slide.

Resources

<https://thinkchecksubmit.org/>

<https://publicationethics.org/files/ethical-guidelines-peer-reviewers-cope.pdf>

<https://plos.org/resources/for-reviewers/>