Giving an effective peer review: sample framework and comments

The system of peer-reviewed journals requires that academics review papers written by other academics, that is, papers written by their peers. We have previously discussed peer review in a general sense, and how authors can effectively respond to peer review. This article will cover the other side: being a reviewer.

Here, we'll look at the basic tenets of peer review, and we've provided a sample framework to help new reviewers give comments that will help authors strengthen their papers.

Basic tenets of peer reviewing:

There are 5 basic tenets that should be kept in mind:

1. Decline the review if you have any conflicts of interest (COIs).

2. Remember that you're advising the journal editor, not making the decision about whether to accept or reject.

3. Try to be helpful and always respectful to the author.

4. Maintain confidentiality of the paper contents.

5. Decline the review if you are too busy, or not familiar enough with the topic, to complete a proper review.

1 Peer reviews are intended to be impartial (unbiased), and so anyone asked to be a reviewer should consider, before accepting, whether they have any COIs. Anything that could make you, as a reviewer, consider the paper more or less favorably because of your relationship with the author is a COI. You should decline to review, or at minimum disclose to the journal editor, papers written by (a) past co-authors of yours, (b) members of your department, (c) your students or mentors, (d) personal friends, and (e) professional rivals. You should also decline if you will gain any potential financial or personal benefits from publication of the work. If you are unsure about whether a conflict of interest exists, check the journal's guidelines or with the journal editor. As examples of COI policies, Elsevier has a general factsheet on COIs and the International Committee of Medical Journal Editors provides information about peer reviewer responsibilities.

2 The reviewer acts as an advisor to the journal editor. Because of this, the review should be more than a simple "accept" or "reject". When writing a review, you should describe the reasons for the recommendation so that the editor can make an informed decision. It is far more important to comment on the academic content of a paper than on grammar and punctuation. However, if the language is too poor to understand the contents adequately, then alert the journal editor. See below for a sample framework that will assist you in ensuring that you've covered the most important points in your review.

3 The review will be sent to the author of the paper. Because of this, reviewers are in a strong position to advise the author on how the paper could be strengthened. Whether you are recommending acceptance or rejection, the author could benefit from your feedback and advice. One particular caution is when you want to suggest the authors cite your own papers—do this sparingly. The review should be intended to help the author, not the reviewer. Finally, reviews should be respectful in tone. Unfortunately, we've all seen derogatory and unhelpful reviewer comments at times, which do not help the author. Peer review should be collegial and respectful.

4 Reviewers receive submitted papers with the understanding that they are handling confidential communications. As such, they should not discuss the review or disclose any of its content to third parties. Reviewers also should not use their knowledge of the work they are reviewing to further their own personal interests.

5 Reviewers who are not able to provide a proper review, due to lack of time or lack of expertise in the area covered by the paper, should decline the review.

Sample Framework for Your Reviewer Comments

Many journals provide reviewers with a form to use during review, but the framework below can be used in other cases.

Describe the basic contribution of the paper. This should be a few sentences on the topic of the paper. Beginning with this helps the journal editor and lets the author know that you've understood the paper.	This paper discusses _____. The main contribution of the paper is _____.
Give your recommendation. You can use one of the following sentences.	I recommend that this paper be accepted. I recommend that this paper be accepted after minor revision. I recommend that this paper not be accepted without major revision. I recommend that this paper be rejected.
Give your reasons for your recommendation. Label these as "major comments".	**Major comments:** 1. The statistical analysis in this paper is suitable/unsuitable for…. 2. In terms of experimental technique, this paper is conventional/novel, and so…. 3. The Methods section does not clearly explain…. 4. The results obtained will be useful in…. 5. Some of the fundamental/recent papers in the field are not cited, among these… 6. I would like to see some discussion of the findings of the papers in relation to recent findings and developments in _____.
Finally, give some additional comments about the paper. This is where you can note problems with spelling and/or grammar, suggest changes to figures and tables, and make other specific comments. Label these as "minor comments".	**Minor comments:** 1. In several places, you've used the term _____, but it seems you mean _____. 2. In some of the figures, the legends are too small to be legible. 3. On page ____, it is stated that _____, but the paper by Smith et al. states that _____. Can you comment on this disparity? 4. Have you thought about testing this with _____?

In conclusion

We hope you've found these tips useful. We currently offer support for new and experienced reviewers in a number of ways, including by translating their comments to English and by editing their English comments to ensure that the authors receiving the review have high-quality, well-worded comments that help them strengthen their manuscripts. Also, if you have any questions about writing effective reviewer comments, please do let us know. We're happy to support you in this important academic task.