

# A Peer Review Process Guide

*"Review for others as you would have others review for you"*

- McPeck et al., 2009

## INTRODUCTION

This worksheet has been compiled from the advice of a number of journals and publications. The aim of the worksheet is to give less-experienced peer reviewers a concrete workflow of questions and tasks to follow when they first peer-review. **Please note** that this is a suggested framework for reviewers to follow. Depending on the journal or subject-field, some elements may be lacking. Users should adapt the worksheet to suit their needs, their personal review style, and the journal's guidelines.

## EVERY PEER-REVIEW PROCESS SHOULD AIM TO (HAMES, 2008):

- Prevent the publication of bad work – filter out studies that have been poorly conceived, designed or executed
- Check that the research reported has been carried out well and there are no flaws in the design or methodology
- Ensure that the work is reported correctly and unambiguously, with acknowledgement to the existing body of work
- Ensure that the results presented have been interpreted correctly and all possible interpretations considered
- Ensure that the results are not too preliminary or too speculative, but at the same time do not block innovative new research and theories
- Select work that will be of the greatest interest to the readership
- Provide editors with evidence to make judgments as to whether articles meet the selection criteria for their particular publications
- Generally improve the quality and readability of a publication (although this is more a by-product of peer review)

## BEFORE YOU READ

Check if the journal has review-guidelines and adjust the following work plan where appropriate.

## READ 1<sup>st</sup> TIME: Gaining an overview

1 Is the article in line with the journal's scope?

Yes?

Continue

No?

Doubtful since the Editor has accepted it for review. However, contact the Editor for clarification before proceeding.

2 Does your expertise cover all aspects of the article? If not, describe which sections you can respond to and why?

3 "Mirror" the article. Make a first draft describing the main aim of the article and why it's innovative.

4 Is the article publishable in principle?

Yes?

Continue to  
2<sup>nd</sup>  
reading

No?

Describe the **fatal flaws** and submit your review.

## READ 2<sup>nd</sup> TIME: The science

For the rest of the review, try and separate your points into “**Major**” or “**Minor**” **issues** and/or suggestions. Using bullet points can help the author(s) keep track when responding to your review.

**5** Do the **Introduction** and **Abstract** clearly identify the need and relevance for this research?

Major issues:



Minor issues:

**6** Does the **Methodology** target the main question(s) appropriately?

Major issues:



Minor issues:

**7** Are the **Results** clearly and logically presented, and are they justified by the data presented? Are the figures clear and fully described?

Major issues:



Minor issues:

**8** Do the **Conclusions** justifiably respond to main questions the author(s) posed? Do the Conclusions go too far or not far enough based on the results?

Major issues:



Minor issues:

## READ 3<sup>rd</sup> TIME: The writing and formulation

**9** Is the manuscript's story cohesive and tightly reasoned throughout? If not, where does it deviate from the central argument?

Major issues:

Minor issues:

**10** How are the grammar and spelling in the manuscript?

Major issues:

Minor issues:

### FINISHED?

**11** Round off your review with a comment about whether you like to peer-review a re-submitted version of the paper, or if you look forward to reviewing the next round of edits.

**12** Compile your responses to the points above into a single document. Here is a suggested order for your review:

- A. Introduction: Mirror the article, your expertise and whether the paper is publishable or if there are fatal flaws;
- B. Major issues;
- C. Minor issues;
- D. Other itchy-bitsy suggestions.

### BEFORE SUBMITTING: READ YOUR OWN REVIEW!

**13** Remember the quote on the first page! **“Review for others as you would have others review for you”**. Make sure that your review is constructive and not offensive. Please change text that could be considered rude before you submit!

### **References and some other interesting and useful articles/resources about peer review**

Hames, Irene. Peer review and manuscript management in scientific journals: guidelines for good practice. John Wiley & Sons, 2008.

McPeck, M. A., D. L. DeAngelis, R. G. Shaw, A. J. Moore, M. D. Rausher, D. R. Strong, A. M. Ellison, L. Barrett, L. Rieseberg, M. D. Breed, J. Sullivan, C. W. Osenberg, M. Holyoak, and M. A. Elgar. 2009. The golden rule of reviewing. *American Naturalist* 173:E155–E158.

Nature Masterclass: Focus on Peer Review (free). <https://masterclasses.nature.com/courses/205>

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