

How I write a journal paper?

彭元凯, 20141112

I have learned through the years that effective writing of a technical journal publication can involve seven steps. These steps usually take a few iterations to obtain a good paper that would be accepted for publication, requiring only some readily doable improvements:

- 1) Make a written note of the results to be included that make new and significant contribution to the fields of study.
- 2) Start writing, without hesitation and without regard to style and polish.
- 3) Write down
 - i. The questions to be addressed (what),
 - ii. The motivation and the anticipated progress relative to what has already been studied by others (why),
 - iii. The approach taken to address the questions and the techniques applied to obtain the new results (how),
 - iv. The results in concise detail consistent with the content of 1),
 - v. The conclusions to gleam out of the most important points of the above, and
 - vi. The relevant issues remaining in the form of a discussion.

This list of information should have already been accumulated as part of the research up to this point in time.

- 4) Then thoughtfully write a concise abstract, focusing on the most important information that helps an interested reader decide whether he or she should read further into your paper. This would help further focus your thinking regarding this paper. Therefore the abstract can be drafted effectively after the content of the paper is put in writing.
- 5) Now, work on the English style and polish, as the content of the paper is clear.
 - i. Improve the clarity of each sentence.
 - ii. Make shorter sentences in place of a long contorted sentence, which is easy to have done when you were writing for the first time, in Chinese or English.
 - iii. As long as the meaning remains unchanged or undiminished, use a simpler word instead of a complicated word. Use a thesaurus to help find other possible words.
 - iv. Remove repetition, redundancy, and text not germane to the conclusions.

Most likely the length of paper would shrink, unless additional content is added.

- 6) Assign sections and section titles, and write a helpful and appropriate title only now. A premature organization of the sections and paper title can lead to missed emphasis that is deserving of all the new results in the paper.
- 7) Retrace Steps 2) to 6) of the draft for the first time, before adding the references for the first time. Every key idea in the paper that has prior work deserves some reference. This step generally would make the referees happier and the paper more readily accepted, but can take more time than you anticipate. However, a list of references based on a deficient draft only compounds the subsequent labor required to identify and organize good references.

The iterations will move faster each time. The process can be finished when the iteration encounters only typos or minor corrections. Do not worry whether your papers will be good or not. They will become better and better in time as you write more papers this way.