Source:
How to Write and Publish a Scientific Paper,
8th edition, by Barbara Gastel and Robert A. Day.
Santa Barbara, California: Greenwood, 2016.

Wishing you much success!
Barbara Gastel

CHAPTER 41

How to Edit Your Own Work

There is no great writing, only great rewriting.

—Justice Louis Brandeis

PREPARING TO EDIT YOUR WORK

If you have reached this point in the book, or if you turned immediately to it, you probably know that good writing is much-revised writing. But how should you approach editing your own work? What should you look for? Is there anyone who can help? This chapter addresses these questions. In doing so, it reviews some key points from earlier chapters, for example about features of good scientific writing.

Challenges in editing one's own work include gaining distance and objectivity. Letting time elapse and changing the physical appearance of your work can help. If feasible, set your writing aside for at least a few hours. You might then be able to approach the piece much as a reader would. Perhaps also change the look of the piece (Hancock 2003) to aid in encountering the writing afresh. For instance, if you have been viewing the writing on a computer, print it out. Or change the typeface or margins. Maybe print the piece on colored paper. Such changes can assist in viewing your writing with new eyes.

Also use your ears. Read your draft aloud. In doing so, you may notice more easily where words are missing or wording is awkward.

Once you are ready to edit, in what order should you proceed? The choice is yours. Some authors start by considering large-scale aspects, such as overall content and organization. No need, they say, to bother with details right away, since parts of the writing might be deleted. Other authors start by polishing the

language so they can see the piece more clearly before considering larger-scale changes. Such polishing can start with the text or with elements such as tables, figures, or references. Regardless of the order you use, thoroughly editing your work (or anyone else's) usually entails more than one round of editing. The final round should proceed from beginning to end, so you can better notice problems in the order of items.

ITEMS TO NOTICE: 8 Cs

Professional editors sometimes speak of checking for the "4 Cs"—which, depending on which editor you ask, can stand for "clarity, coherency, consistency, and correctness" (Einsohn 2011, p. 3) or variants such as "correctness, clarity, consistency, and courtesy." When editing your own work, consider checking for "8 Cs": compliance, completeness, composition, correctness, clarity, consistency, conciseness, and courtesy. Writing that achieves all eight Cs is likely to excel at communication, which is the C that is the overall goal.

Regarding *compliance,* ensure that the writing complies with all instructions, such as journals' instructions to authors and funders' directions for grant proposals. In addition, ensure that you have complied with relevant conventions in your field, for example regarding terminology and document structure. If your research involves animals or human subjects, also confirm that you have documented compliance with requirements in that regard.

Check for *completeness.* Does the document contain all necessary components? Does each component contain all the information that it should? Are necessary details included, for instance in the methods section?

Evaluate the *composition* of the piece. Is the overall structure appropriate? Is every section logically organized? Are paragraphs well structured, with strong topic sentences? Does one idea lead smoothly to the next? Are tables and figures well designed?

Check *correctness* of content and expression. Make sure all information is correct, both in the body of the text and in tables, figures, and references. See whether all the logic is valid. Also ensure that the grammar, spelling, punctuation, and word use are proper. If some aspects of such mechanics pose particular difficulty for you, devote special attention to them. For example, if you struggle with verb tenses, perhaps review your draft an extra time, checking specifically for them.

Pay attention to *clarity.* If some words or phrases might be unclear to readers, make sure they are defined. Likewise ensure that abbreviations are defined on first use. See whether antecedents of words such as "it" are clear. Look for places where the wording could be made clearer or where relationships of ideas could be clarified by using transitional words (such as "also," "first," "then," and "however"). Seek to improve passages where your reasoning might not be explicit enough for readers to follow. Identify sentences that are too long or too complex to understand easily, and divide or otherwise restructure them.

Look for *consistency* as well. Is all the information consistent—or, for example, do numbers differ between table and text? Is the content of the abstract consistent with that of the body of the piece? Is the terminology consistent throughout? Is the formatting, for example of subheadings, consistent? Do items appear in consistent order? Where appropriate, are tables and figures consistently formatted?

Both to save space and to aid readability, try to increase *conciseness.* In keeping with the examples in Appendix 2, replace long words with shorter equivalents and condense wordy phrases. Remove redundancies. Delete tangential or irrelevant content. In seeking conciseness, however, take care not to decrease clarity or diminish meaning.

Finally, keep *courtesy* in mind. Make sure you have been courteous to those whose work you discuss, others you mention, and your readers. Replace language that is unintentionally derogatory (such as "Previous researchers have failed to explore") with neutral language (such as "Previous researchers did not explore"). Revise any language that is not inclusive or that seems disrespectful of some population groups. To be courteous to readers, make sure you have attended to other Cs that help make writing easy to read—such as clarity, conciseness, and compliance with conventions. The effort that you invest in editing can save your readers effort and thus help ensure that your work will be read, understood, and appreciated.

A GOOD CHOICE: CHECKLISTS

Checking for all eight Cs at once can be hard or impossible. Therefore, generally check writing in several phases. To guide yourself, consider using checklists.

One good strategy is to use both a core checklist on general aspects of writing and a specialized checklist geared to the type of document that you have drafted. Figure 41.1 is an example of a core checklist. Figures 41.2 and 41.3 are examples, respectively, of specialized checklists for a scientific paper and for a grant proposal. Consider using these checklists or modifying them to suit your needs. Also consider obtaining or developing such checklists for other types of documents. Of course, if your target journal or other intended recipient provides a checklist, be sure to consult it.

Some General Questions to Ask: Editing One's Own Writing

1. Is the content complete, or should any content be added?
2. Should any content be deleted?
3. Is all the content accurate?
4. Is all the logic sound?
5. Do the content and crafting of the piece suit the audience?
6. Does the piece follow appropriate conventions regarding overall format?
7. If subheadings are allowed, are they used effectively?
8. Are sections and paragraphs of appropriate length?
9. Should any tables or figures be added or deleted?
10. If tables or figures are included, are they well designed?
11. Would typographic devices, such as italics of bullets, be helpful anywhere?
12. Is the piece well organized at various levels?
13. Are grammar, spelling, punctuation, and usage correct throughout?
14. Are verb tenses appropriate?
15. Are antecedents of all pronouns clear?
16. Have all acronyms been defined (and are all the acronyms worth using)?
17. Are sentences of appropriate length and structure?
18. If references are cited, are they in the appropriate format? Do all cited references appear in the reference list, and are all listed references cited in the text?
19. Is the writing clear, exact, and concise?
20. Have all instructions been followed?

Figure 41.1. Sample core checklist for editing one's own writing. A version of this checklist also appears in Gastel B. 2015. Editing and proofreading your own work. AMWA J. 30(4):147–151.

FINDING AND WORKING WITH AN AUTHOR'S EDITOR

Especially if you are a beginning author, consider seeking guidance from a manuscript editor. Individuals known as *author's editors* specialize in revising authors' work before submission. They can also help authors after submission, for example in improving a paper as requested by a journal.

How can you find an author's editor or the equivalent? Some universities, research institutions, and departments employ editors to assist scientists and scientists-in-training. In fact, some, such as the Mayo Clinic and The University of Texas MD Anderson Cancer Center, have scientific-publication units with multiple editors to provide such help. There also are freelance author's editors

Specialized Checklist: Editing One's Draft of a Scientific Paper

1. Does the title accurately and concisely indicate the content?
2. Are the appropriate people listed as authors?
3. Does the abstract accurately reflect the content of the paper? Is the abstract a suitable length?
4. Does the introduction provide sufficient context?
5. Does the introduction make clear what gap the research was intended to fill?
6. Does the introduction indicate the hypotheses or research questions?
7. Does the methods section provide sufficient information to replicate the research?
8. Does the methods section provide sufficient information to evaluate the research?
9. In the methods section, are sources of materials and equipment identified?
10. If the research was on humans or animals, are appropriate approvals noted?
11. Are the results presented in logical order?
12. Are the results presented in appropriate detail?
13. Are statistics appropriately presented?
14. Does the discussion address the hypotheses or research questions posed in the introduction?
15. Does the discussion put the results in sufficient context?
16. If relevant, does the discussion address strengths and weaknesses of the research?
17. If relevant, does the discussion identify applications or implications of the research?
18. Have the appropriate parties been acknowledged?

Figure 41.2. Example of a checklist for editing one's own scientific paper. Such a checklist could best be used along with a more general editorial checklist, such as shown in Figure 41.1. A version of this checklist also appears in Gastel B. 2015. Editing and proofreading your own work. AMWA J. 30(4):147–151.

and freestanding editorial companies. Networking with fellow researchers can aid in finding editors and editorial services that others regard highly. Lists of individuals who identify themselves as freelance editors appear on the websites of some universities, for example through the thesis office or writing center. Editors available for freelance work who have passed a rigorous examination in life science editing can be identified through the Board of Editors in the Life Sciences website, www.bels.org. Some commercial editing

Specialized Checklist: Editing a Draft of One's Grant Proposal

1. Does the title clearly and accurately convey the focus?
2. Is the abstract informative and clear? Ditto for any other sections serving as summaries?
3. Are the goals or hypotheses clear?
4. Is the originality of the work apparent?
5. Is the proposed work clearly relevant to the mission of the funding source?
6. Is the importance of the proposed work explained?
7. Is sufficient context provided?
8. Is the amount of proposed work realistic?
9. Is it clear that the personnel are capable of doing the proposed work?
10. Are sufficient justifications provided for choices, for example of methods?
11. Is sufficient supporting evidence included?
12. Is sufficient justification provided for budgetary items?
13. If there will be cost sharing, is sufficient information provided?
14. If preliminary studies are required or advisable, is there enough information about them?
15. If a timeline would be advisable, is one included?
16. If evaluation plans are needed, are they sufficient?
17. If dissemination plans should be included, are they sufficient?

Figure 41.3. Example of a checklist for editing one's own grant proposal. Such a checklist could best be used along with a more general editorial checklist, such as shown in Figure 41.1. A version of this checklist also appears in Gastel B. 2015. Editing and proofreading your own work. AMWA J. 30(4):147–151.

services are listed at www.authoraid.info/en/resources/details/750, and editorial guidance from volunteer mentors can be sought through the AuthorAID project (www.authoraid.info/en and www.authoraid.info/es). Although authors may benefit most from an editor who can meet with them face-to-face, email and other communication technologies allow effective use of an author's editor in another city or even another country.

Before giving your writing to an author's editor, edit it yourself insofar as feasible. Doing so helps use the editor's time efficiently, which may be especially desirable if the editor has many authors wanting help or if you yourself will pay the editor for the time spent. More important, doing some editing yourself can make the writing easier for the editor to understand, thus facilitating provision of suitable editorial feedback.

Communicate with the editor or editorial service about the desired extent of editing. Do you want the editor only to correct errors in grammar, punctuation, and other mechanics? Are you seeking more extensive help, including improvement of wording and sentence structure? Or do you desire whatever may strengthen the piece, including reorganization if deemed advisable? Ideally, once the editor has looked at the writing, find out what level of editing he or she considers suitable, and discuss how to proceed. Be available to answer questions. Realize that an author's editor is an advisor and thus that final decisions about the writing are yours.

A good author's editor, like a good peer reviewer, also serves as a good teacher. Notice revisions that the editor makes, and learn from them. If you are uncertain why a recurrent or major change was made, ask the reason if circumstances permit. Maybe compile a master list of changes made, to help avoid similar problems in future writing. If you use checklists in editing your work, perhaps revise them to reflect insights gained from the editor's feedback. In short, make the editor an ally and instructor in editing your own work.