

Suggested revision strategy (18.821 F14)

After setting the paper aside for a time to gain distance, read the paper from the point of view of your audience and revise to improve clarity/readability. Wording issues can be handled as you read, but larger and smaller issues such as restructuring and finding all instances of botched curly quotes can distract you. So jot these things down in a list as you read through the paper.

Here's a sample editing/revision checklist that you may find to be helpful:

0. Read through the paper from the point of view of your audience looking for ways to improve correctness, clarity, and readability. *Encourage* teammates to provide feedback as well.
1. Evaluate each formal statement, such as a lemma, conjecture, proposition, or theorem:
 - a) Does the reader have easy access to all notations and definitions required to make sense of the statement?
 - b) Are the assumptions and conclusions clear? (Can the reader rewrite the statement as an if-then statement?)
 - c) Is there misprints?
 - d) Are the notations and definitions simple, efficient, and easy to remember? Do they convey faithfully what is intended?
 - e) Do you reinforce the important features of the statement, e.g., via strategic redundancy or commentary?
 - f) Sketch the proof's logic and identify the key steps. Is the written proof designed to clearly convey this logic, structure, and relative importance?
2. Check the big picture by outlining the paper and the main ingredients of each section.
 - a) Are the main results clearly emphasized, e.g., as theorems?
 - b) Does the structure make sense? Is it designed to help readers?
 - c) Is the structure clearly communicated in the introduction, via section heads, and via appropriate guiding text within sections? Does the paper make sense when skimmed by looking only at section heads, first paragraphs, formal statements, and figures?
 - d) Are notation and terminology used consistently? defined before (or as) used?
 - e) Is numbering sequential and consistent so statements are easy to find?
 - f) Which aspects of the project were hardest for you to understand? Have you helped readers understand these parts?
 - g) If you restructure, do the parts still work in their new contexts?
 - h) Does the introduction accurately describe the revised paper, previewing the nature of the problem, the main results, and the structure in a way that will make sense to readers before they read the paper?
3. Proofreading, etc.
 - a) Read the paper aloud and notice places that sound awkward or where your reading hesitates. There are likely to be errors (e.g., typos) in those spots.
 - b) Spell check (many LaTeX editors have a spell checker that ignores tex code)
 - c) Redo any algebraic manipulations to check their correctness.
 - d) Print out the paper to proofread—you'll catch mistakes you'd miss on screen

Add your own items to this checklist! (E.g., search for curly quotes, "this", "I", "will")

After you revise, set the paper aside to gain distance and read it again from the point of view of your audience to ensure that the revisions work well in context.