How to be an effective journal and conference paper reviewer without being a jerk

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Reviewers and editors are essential to the publishing process, and yet no one ever tells us how to write a constructive review. Reviewers typically have two roles: to provide authors with feedback to improve their paper, and to assist conference program chairs or journal editors in making decisions about what is accepted for publication.
I recently took over as editor for JWM. My vision for JWM is.... This vision is not just for my journal, but also for academic publishing as a whole.

VISION

Journal of Women and Minorities in Science and Engineering is a force for nurturing the community of diversity and inclusion scholarship and practice in STEM, and is a place where:

- Authors feel supported in their life’s work and receive fair, constructive, and timely feedback
- Reviewers practice the art of constructive feedback so that each review is a tangible contribution towards creating a constructive and supportive culture for academic publishing in STEM education.
- Associate editors create a community dedicated to holding our field to a higher standard in how we treat each other and our life’s work. As individuals and as a group, associate editors lead by example in creating a constructive culture for academic publishing.
There are multiple reasons why you might choose to review for a journal like JWM or conference like CONECD. A 2009 study of peer review conducted by Sense About Science with funding from Elsevier found that reviewers gave the following 3 reasons for wanting to review (85% said Just enjoy seeing other papers and being able to improve them, 90% responded that they Review because they like playing their part as a member of the academic community and 91% said that they believe their last paper was improved by the peer review process.

Why do you review? (ask audience)
One thing that is really important for reviewers to keep in mind is their ethical responsibility, which includes Confidentiality, Constructive critique, Competence, Impartiality and integrity, Disclosure of conflict of interest, Timeliness and responsiveness.

We’re going to concentrate on constructive critique today.
These are some questions you might consider when deciding to accept an invitation to review.

If you have submitted a paper or presentation to the journal or conference, it’s expected that you will ”pay it forward” by reviewing someone else’s paper/presentation.

SHOULD I ACCEPT THE INVITATION?

- Do I have expertise related to one or more aspects of the paper?
- Can I meet the deadline (or do I need to negotiate a new one)?
- Am I in a place right now to be constructive and unbiased?
- Have I submitted a paper/presentation to the journal/conference recently?
Reviewers really have dual roles— as reviewers our responsibility is to the authors and the editor (or program chair)
Is specific. Constructive feedback uses examples from the manuscript where possible to help the author and editor understand what you mean.

Is actionable. Criticisms of the manuscript are followed by suggestions for improvement.

Is prioritized. It is easy for an author (or editor) to get overwhelmed by the volume of feedback in a review. Prioritized feedback labels major and minor concerns. It is organized in a way that allows the reader to easily understand which points to prioritize in a revision, either according to sections of the paper or thematically. Prioritized feedback makes clear what concerns are global (across the article as a whole) and which concerns are local to a specific section (such as in the research design).

Is balanced. Constructive feedback describes the document’s strengths as well as areas for improvement. It is important for the reviewer to demonstrate enthusiasm to editor through the language chosen, since it tells the editor which elements should continue through a revision.

Acknowledges the reviewer’s positionality. Not only does understanding that a reviewer is someone who does X or knows about Y demonstrate that the reviewer knows what they are talking about, but also understanding a reviewer’s positionality helps the author and editor place the reviewer’s comments in context. In situations
where mixed reviews are received, it helps the editor prioritize and make decisions about which critiques require a response from the author.

**Contains positive, tactful, and non-threatening language that address the document, not the author.** By focusing on the manuscript and not the author, constructive feedback avoids personal criticisms.

**Is speedy.** We all need feedback. Our careers are dependent on it. The great work we are doing cannot be shared and be used by others if it is not published in a timely manner.
One way that you might think how to start your review is to ask yourself these 3 questions. If the answer is yes to all 3, it’s likely that you want to convey your enthusiasm for the work and offered specific and addressable suggestions to the authors.

Nicki Sochacka talks about there being a common exception to this approach. What if the answer is yes but the problem, theory (if used), methodology/methods, and findings do not align and, therefore, the “interesting finding” is not defensible? Nicki says, “These are the manuscripts that I (sometimes quite painfully) reject. In these cases, I try to be as explicit as possible about why I am choosing to reject the manuscript, and I lay out alternative approaches that could help the authors achieve their goals. “

If the answer to one of these is no, then you can recommend rejection.

QUESTIONS TO ASK OURSELVES AS REVIEWERS:

- Does this manuscript represent a genuine effort?
- Does it contain an interesting finding, or contribution, to STEM education?
- Would publishing this finding/contribution strengthen the reputation of the journal or the field of engineering education research?
Your positionality statement is important for authors and editors to understand the perspective and expertise you bring, and to interpret your comments. Stating what you like about the paper helps authors and editors see that you understand the paper and makes your review constructive.

Some journals/conferences like CONECD allow confidential comments to the editor or program chair.
I’ve compiled some examples of constructive comments. Some of these come from Taylor & Franics (n.d.). Some come from actual reviews that I’ve written or others have written for JWM. Let’s talk about what these achieve.... [audience interaction]
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- This paper would benefit from some closer proofreading. It includes many grammatical errors (e.g., agreement of verbs) that at times make it difficult to follow.
- The paper would benefit from stylistic changes to the way it has been written for a stronger, clearer, and more compelling argument.
- There are a few sentences that need rephrasing for clarity....
- The title does not represent the data or study well. From the title, I would expect ....Consider rewriting the title to better represent ....
- It may be useful to engage a professional editor for this purpose.
There are a few things that are really important to include in your review when you are recommending acceptance.

Provide details (important whether recommending acceptance, revisions, or rejection) actually

Demonstrate your enthusiasm to editor/program chair through the language you choose and the specificity of your comments. Here are two examples.

It’s also fine to mention what could be improved—make sure that these are minor comments and not major concerns
WHEN RECOMMENDING REVISIONS OR REJECTION

- Be specific about changes that need to be made and what is critical and what is not as critical
- Why you are recommending rejection—be specific as possible.

If you’re recommending revisions or rejection, it’s also very important to be as specific as possible. Give examples of your concerns. Help the author and editor understand what are major concerns and what are minor ones, potentially using the outline of the review we discussed earlier.
We each have a role in creating and sustaining a constructive culture for academic publishing. You can consider each review you write to be tangible contribution towards this culture!
REFERENCES


Other resources: Journal of Engineering Education Reviewer Resources. https://ceces.clemson.edu/jee/jee-reviewer-resources/