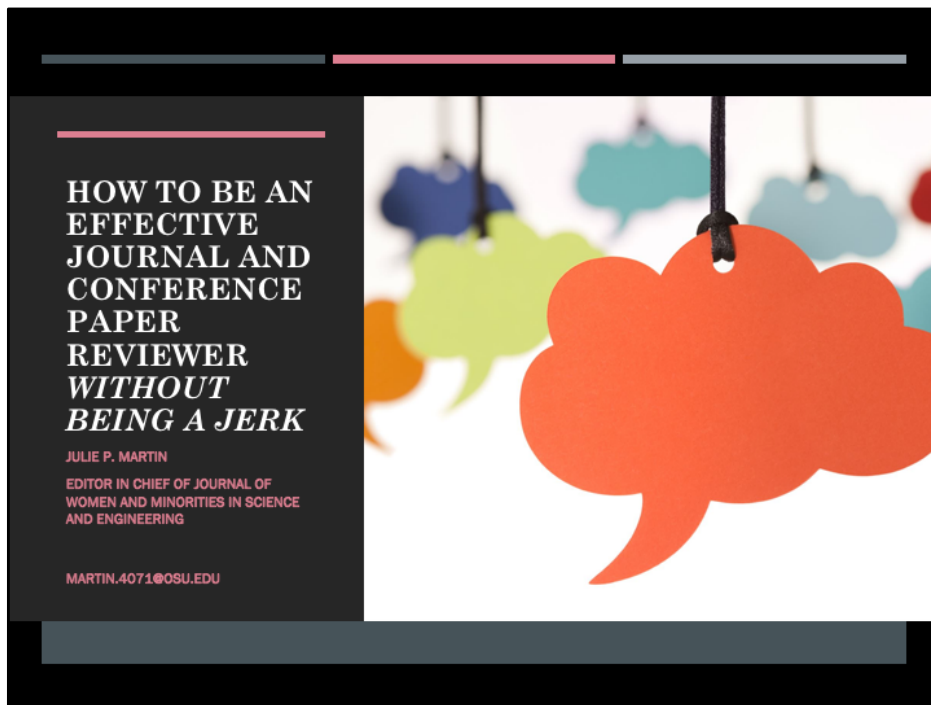


How to be an effective journal and conference paper reviewer without being a jerk

Dr. Julie P Martin, Clemson University

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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.



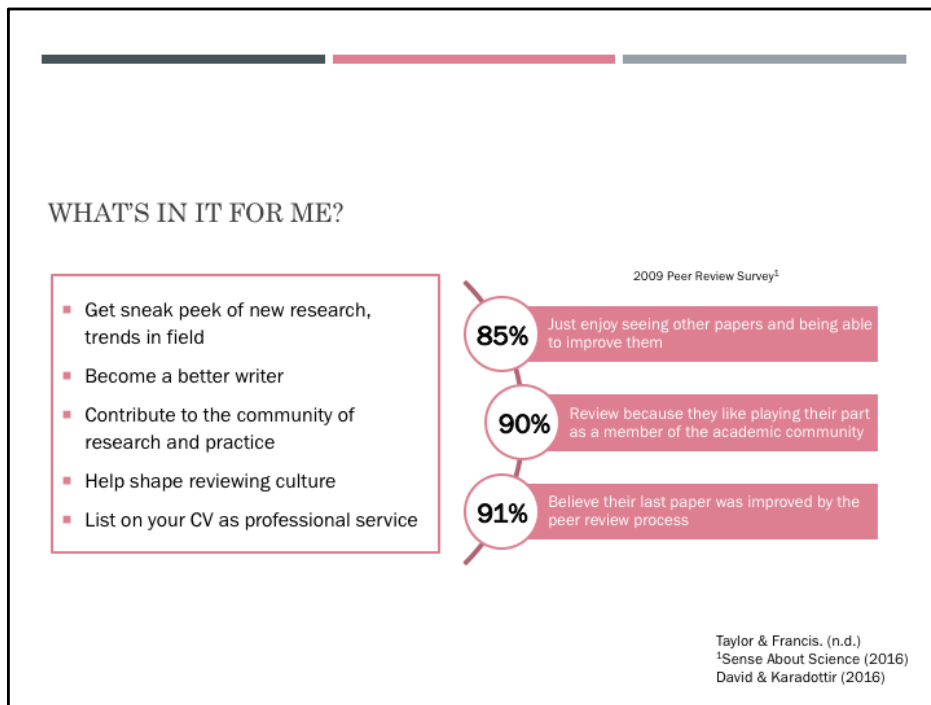
VISION

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.

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.



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)



ETHICAL RESPONSIBILITIES OF REVIEWERS

- Confidentiality
- Constructive critique
- Competence
- Impartiality and integrity
- Disclosure of conflict of interest
- Timeliness and responsiveness

Trudgett et. al. (2012)

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



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?

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.

WHAT ARE MY ROLES & RESPONSIBILITIES AS A REVIEWER?

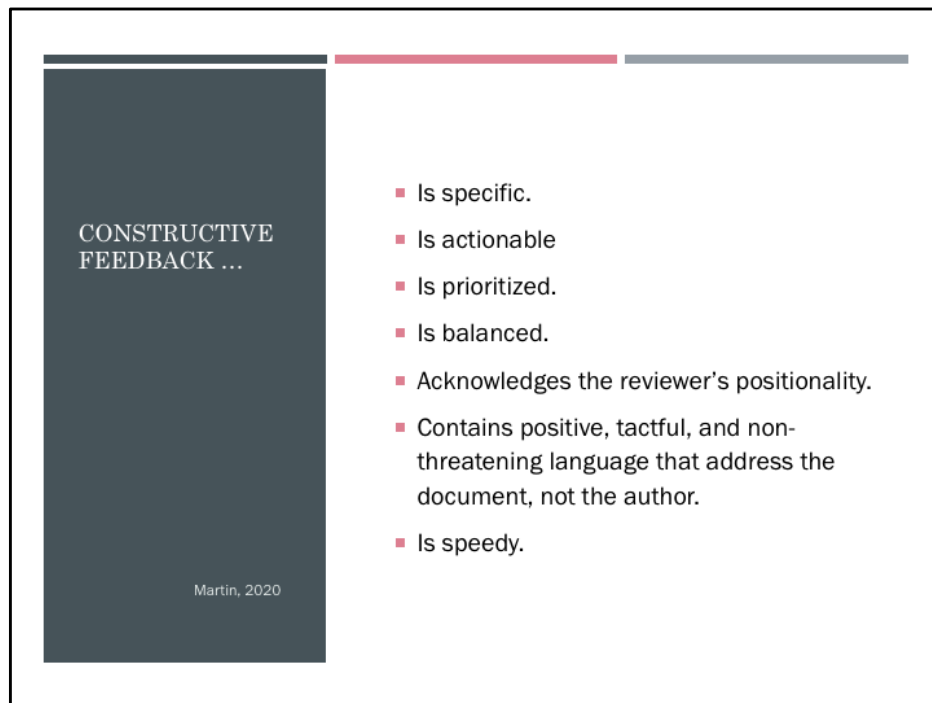
Authors

Editors

- Raise any ethical concerns
- Assesses the work's originality, scientific merit, & interest to audience
- Provide timely feedback that is:
 - unbiased and confidential
 - aimed towards improving the work, critiques supported by evidence
 - not personal

Trudgett et. al. (2012)

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.

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?

Sochacka, 2019

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.

OUTLINE OF A REVIEW

- Your positionality statement
- Summary of the paper from your perspective
- What you like about the paper (including its strengths, contribution, measures of quality)
- Specific and addressable criticisms
 - Organize by major concerns, minor concerns (OR)
 - Organize by section of the paper (OR)
 - Organize thematically
- Other comments/ suggestions (state that these not critical/optional)
- Detailed copy edit suggestions [only for revise/accept]
- *Journal/conference specific questions
- Recommendation
- Closing
- [Confidential comments to editor]

"Don't tell the authors what paper they should have written; tell them how to improve the paper they have written"
(Stoop, 2018)

David & Karadorrir, 2016
Sochacka, 2019
Stoop, 2018
Wiley, n.d.

Your positionality statement is important for authors and editors to understand the perspective and expertise you bring, and to interpret your comments.
The summary helps authors and editors see that you understand the paper
Stating what you like about the paper helps to make your review constructive

Some journals/conference like CONECD allow confidential comments to the editor or program chair

**MAKING
YOUR REVIEW
SOUND
CONSTRUCTIVE**

Fit and audience

- As written, the manuscript seems like a better fit for [specific other journals]. These journals are a better fit because neither the theories nor the findings in the manuscript specifically inform diversity, equity or inclusion, which is the focus of [journal[]].
- For the purposes of this audience, the ____ section should be written more appropriately. For example, defining ____ is not probably something that this audience needs. The authors can and should, however, discuss the methodological traditions and paradigms employed, and why these are appropriate.

Taylor & Francis, n.d.

I've compiled some examples of constructive comments. Some of these come from Taylor & Francis (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]

The slide is titled "MAKING YOUR REVIEW SOUND CONSTRUCTIVE" and is divided into two main sections. The left section, on a dark grey background, contains the text "Positive comments examples" and "Taylor & Francis, n.d." at the bottom. The right section, on a white background, contains a bulleted list of four examples of constructive comments. A horizontal line with a red segment and a grey segment is positioned above the list.

MAKING YOUR REVIEW SOUND CONSTRUCTIVE

Positive comments examples

Taylor & Francis, n.d.

- The topic is timely and important to our readership.
- The paper makes significant contributions with respect to
- This is a well-written article that identifies an important gap.
- This paper has the potential to become a seminal piece in [journal].

I've compiled some examples of constructive comments. Some of these come from Taylor & Francis (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]

MAKING YOUR REVIEW SOUND CONSTRUCTIVE

Improvements needed

Taylor & Francis, n.d.

- The author could strengthen the paper by...
- The paper would be significantly improved with the addition of more details about...
- I think with your data you can say more about...
- To make this paper publishable, the author needs to respond to the following substantive points...
- In the "Discussion" section I would like to see more information on...
- This is an important topic, but the argument as structured is not effective in pointing to a compelling need to study this.
- There are several areas that could make this article more impactful, but as it stands this article is not fit for publication.

I've compiled some examples of constructive comments. Some of these come from Taylor & Francis (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]

MAKING YOUR REVIEW SOUND CONSTRUCTIVE

Improvements needed

Taylor & Francis, n.d.

- It would be helpful for the authors to articulate the novel contribution of this research is to the field of engineering and science education.
- I strongly advise the author to rewrite their introduction, analysis, and discussion to ...
- A clearer purpose and rationale could significantly improve the readability of the paper.
- I don't think that this article contains enough robust data to support the claims made on page X, lines Y-Z.
- On p. X, the claim, "____," is not well supported from the arguments made in the paragraph. Please provide better support for this argument if it is important to the message of the paper.
- There is an interesting finding in this research about... However, there is insufficient discussion of exactly what this finding means and its implications.
- I urge authors to consider carefully how they use tables and figures to support their findings. In the current draft, the point of using the table is not clear....

I've compiled some examples of constructive comments. Some of these come from Taylor & Francis (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]

MAKING YOUR REVIEW SOUND CONSTRUCTIVE

Editing

Taylor & Francis, n.d.

- 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 expectConsider rewriting the title to better represent
- It may be useful to engage a professional editor for this purpose.

I've compiled some examples of constructive comments. Some of these come from Taylor & Francis (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]

WHEN RECOMMENDING ACCEPTANCE

- Provide details about why it should be accepted. ~~“This is a great paper, I recommend acceptance.”~~
- Demonstrate your enthusiasm by the words you use!
- This paper represents a potentially significant contribution to the journal because of its _____.
- Tell authors and editor what could be improved.
- The authors boldly take on and theories issues that have stymied the STEM community’s discussions for years. The suggestions in this review are offered as potential ways to improve the readability of the manuscript for a reader who is not as well-versed in these topics. Additionally, a few specific editorial comments are made for the authors’ consideration.
- This is a well-crafted paper that describes a high-quality qualitative study on _____. The theoretical frameworks are highly appropriate, the methods are well-designed, and trustworthiness is appropriately addressed. Findings from this study are highly relevant and timely. The extension of _____ from its original use in _____ to _____ is innovative and noteworthy; this type of theoretical extension and ‘cross-over’ is something this reviewer believes the Journal should highly support. There are a few minor things I suggest to help boost the important contribution this work will make to the literature.

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

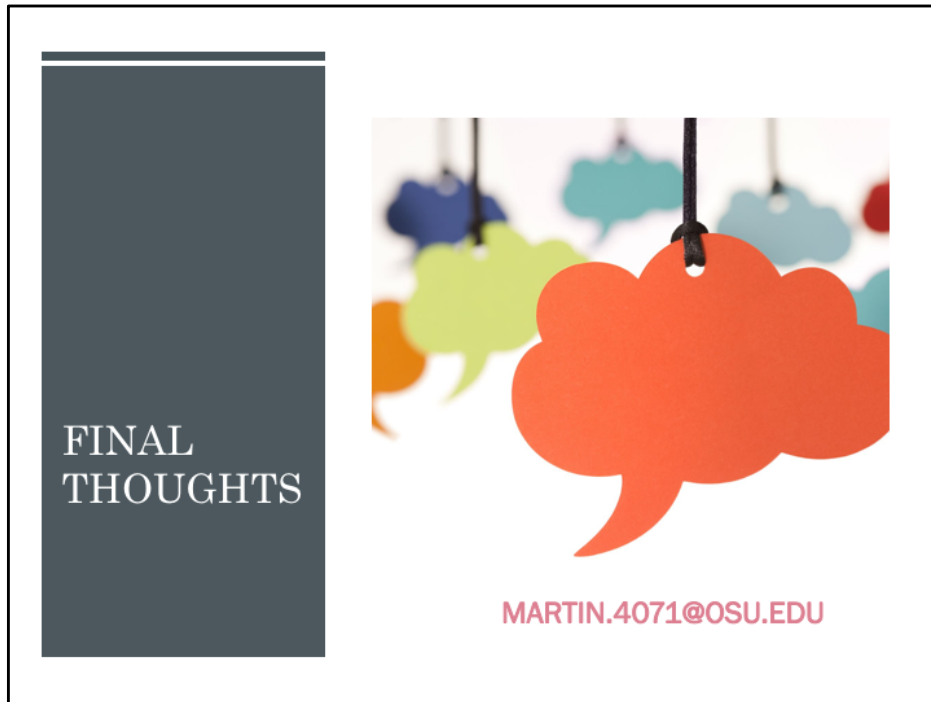


WHEN RECOMMENDING REVISIONS OR REJECTION

- 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!

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