## Tips and Considerations for a Constructive Peer Review Experience

Based on work by Drs. Stephanie Cutler & Kacey Beddoes

Based on interviews with reviewers and editors for the *Journal of Engineering Education*, multiple workshops were hosted to discuss the characteristics of productive reviews. The review characteristics provided below are based both on the workshop participant responses and the research interviews.

## **Reviewer & Editor Review Criteria**

• Argument & alignment

"the argument has to be completely in alignment, so that means the theory needs to match up with the research questions, and the methods need to make perfect sense, and the results need to follow from all of that stuff and not overstep their bounds."

• Methods

"If your methods aren't strong, your conclusions are weak. Your methods are the guts of your article."

• Added value

"In terms of moving the field forward, I feel like I want to know when I read the paper where the gap is in the literature. What is the piece that this paper is contributing that others haven't done?...Or if it has been done, what is unique about the way in which you are doing it here so that I'm learning something from reading this?"

• Communicate so the audience understands

"the more complex their paper is or their research project it, the harder it is to describe it to others. And if you don't describe it well to others, then it's more likely to be rejected."

## Workshop Participant Review Considerations

• Be constructive

Think about how it feels to get a review as an author while writing your review.

The purpose of the review is to improve the manuscript by providing constructive feedback.

Make comments/suggestions that are actionable.

• Be respectful

Be critical while still being respectful.

Assume that the author is competent in the field and acknowledge authentic effort within paper.

Comment on the paper/manuscript, not the authors.

• Organized feedback

Organize the feedback in your review to make it easier for the authors to follow. Maybe sectionby-section then overall feedback or highlighting key points that need to be addressed

• No copy editing in first round of review.

No copy editing/Acknowledge the power of a good copy editor (later in the process)

• If you agree to a review, take the time to do it well.

**REMEMBER!** Engineering Education Research is still developing as a field. Talk to your peers, mentors, and any member of the community about the peer review process.



This research is supported by NSF through grant 1762436/ 1929728. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.