Reviewers play a key role in the scientific publication process, by supporting journal editors in making decisions about which manuscripts to publish and by supporting manuscript authors in improving their work. This document, prepared by an ad hoc committee of journal editors and PER community members, grew out of informal conversations that brought our attention to the negative impact that particular reviews have had on community members. These conversations precipitated the creation of a survey that invited PER community members to share their experiences of the PER journal review process. Here, we summarize the results of the survey and issue recommendations on the basis of our interpretations. The focus of this document is on **respectful reviewing**; it does not comprehensively address reviewing practices writ large. The audience is meant to be reviewers for physics education research journals.

The survey we conducted asked community members to share aspects of their experience of journal reviews that were affirming and aspects that were dehumanizing (*i.e.*, belittling, disrespectful, or demoralizing). We received 42 responses,¹ and while we cannot claim this is a representative sample in a formal research sense, the results did indicate that further conversation was warranted. Resoundingly, the message we received is that authors appreciate substantive critique from reviewers who try to understand the authors' work and help the authors make their manuscript better. Authors experience reviews as affirming when reviewers provide constructive feedback and helpful suggestions, using language indicating that the review process is an honest intellectual exchange. Survey respondents listed examples of affirming reviews in which reviewers: indicated that they had read and understood the manuscript, engaged with the manuscript as a critical friend, and expressed a belief that the work can be made better by the authors. Further, authors experience reviews as affirming when reviewers offer positive feedback by saying what they like or find interesting about the research, what parts are well done, or that they look forward to hearing more. Examples given by survey respondents included statements like, "I first want to highlight the importance of the work and commend the authors in initiating a conversation about x," or "I think the authors have responded well to the following critiques," with detailed interpretation of the critiques and responses. Conversely, authors experience reviews as demoralizing when reviewers use strong, critical language that is not backed by substantive or constructive feedback. Examples given by survey respondents included reviewers stating that someone's work is "not physics," using questions like "really?" or "you do?" to indicate disbelief, or reviewers asserting judgments like "odd notion" to indicate disagreement, all without expressing first that they have understood what the author is trying to say. When authors feel like reviewers are not taking their ideas seriously they feel dismissed or condescended to.

These themes from our survey suggest a specific framing for more respectful manuscript reviewing: that reviewers treat manuscript authors as competent intellectuals who are inviting conversation and feedback around an artifact of an author's substantial investment. While one of the important roles of a reviewer is to recommend the rejection of unacceptable manuscripts, it is our opinion that this *gatekeeping* mentality in reviewing has often/sometimes been overemphasized. Instead, we are calling for a balance that acknowledges the dual role of reviews in supporting

¹ Respondents represent a range of experience in PER (70% college faculty, 10% graduate students, 7% postdocs); self-identified as female (37%), male (58%), or neither/none (5%); and self-identified as white or Caucasian (70%), Asian or Asian American (7%), Hispanic (2%), two or more races or mixed (7%), or no response/none (15%).

authors to develop the highest quality manuscript possible, as well as in assisting editors to accept high quality manuscripts that fit the journal mission.

We offer the following suggestions to reviewers for creating balanced respectful reviews:

- Start each review with a **neutral and substantive revoicing** of the main points of the article, without using value-laden adjectives. The point is to communicate that you have read, understood, and engaged with the manuscript. Revoicings also serve the role of supporting authors in identifying ways in which their main points may not yet be clearly communicated.
- Explicitly **articulate what you like** about the article. What are the strengths of the article and in what ways do you support the article?
- Identify how the article might have important implications, even if they have not yet been fully actualized. If there are ways in which the potential of the article has not been met, identify ways the authors might build on or add to what is already there to realize the paper's potential. For example, you might identify literature that the authors may need to consider to more visibly position themselves as a part of a broader conversation.
- Identify ways that the article could better highlight the important points being made, or ways readers might be confused by the article as written. This could include identifying needs for clarification, suggesting structural/organizational pieces that could be added or refined to create a more coherent logic, articulating perceived inconsistencies in the argument or science, or naming additional evidence that readers may need to believe the argument.
- Eliminate ad hominem attacks, unsupported value judgments, or comments about the authors themselves (rather than the substance of the argument), such as "this is not physics," "the writing is horrible," etc.
- Ground your overall recommendation -- to publish as is, revise, or not publish -- in the bullets above, and in article's fit with the journal's aims. E.g., "I do not yet think this article meets _____ criterion for publication, but I see its potential in the ways described above, and so I recommend a revise and resubmit."

Some community members, in reading these suggestions, have interpreted us to be bidding that reviewers never recommend rejection of a manuscript. To be clear, this is not what we are advocating. Instead, we are advocating that *all* recommendations -- to publish, revise, or not publish -- be both critical and kind. We think the suggestions above support the writing of respectful reviews across the spectrum of publication recommendations.

In addition, in response to comments offered by survey respondents and community members, the editors of our field's major journals -- particularly Phys Rev, TPT, and AJP -- invite authors to flag reviews that they experience as belittling, degrading, or disrespectful in the ways depicted above.

This document was prepared by an ad hoc committee with members Kathy Harper (Editor, Reviews in PER), Charles Henderson (Editor, Physical Review Physics Education Research), Amy Robertson, Gary White (Editor, The Physics Teacher), and Michael Wittmann (former Editor, PER Section, American Journal of Physics). Dated August 19, 2019.