A Collaborative Approach to Manuscript Revisions and Responses to Reviewer Comments

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Richards, K. A. R., Hemphill, M. A., & Flory, S. B. (2022). A collaborative approach to manuscript revisions and responses to reviewer comments. Journal of Teaching in Physical Education, 41(3), 341–346.

Abstract:

While there are benefits to collaborative research, navigating group dynamics can also bring challenges, particularly for doctoral students and early career academics who are new to the research process. These dynamics extend beyond initial manuscript submission and include processes associated with interpreting reviewer comments, deciding upon and making revisions, and developing clear author response documents through the revision process. Herein, the authors overview one systematic and replicable approach to managing revisions. Steps include (a) read, set aside, and return to the reviewer comments; (b) document initial reactions to comments; (c) collectively review the comments and decide upon direction; (d) coordinate revisions to the manuscript; (e) craft final response statements; and (f) prepare a resubmission cover letter to the editor. Recommendations will be provided for approaching the revision, including how to revise the manuscript to highlight edits, and suggestions for tone and approach, particularly when disagreeing with a reviewer.

Keywords: academic journals | paper submission | publication | publishing research | research

Article:

Double-blinded peer review, in which neither the author nor the reviewers are aware of one another's identities, has become foundational to the academic publishing process across areas of scientific research (DeMaria, 2011; Kirk, Hastie, MacPhail, O'Donovan, & Quennerstedt, 2014). Nevertheless, undergoing the manuscript review and revision process is both an intellectual and emotional endeavor (Kirk et al., 2014). The very nature of the review process is such that most comments will likely be recommendations for improvement or change, and authors may need to invest significant time and energy into rewriting parts of the manuscripts or reanalyzing data. "Even experienced researchers are known to dread receipt of an editor's letter and reviewer comments as they are forced to engage with an unknown audience's evaluation" of their scholarship (Elliott, 2018, p. 285). This is especially the case for early career researchers who may not be accustomed to the norms of journal reviewing (DeMaria, 2011). Responding to reviews is

often tacit and is not taught explicitly during doctoral studies or described on journal websites (Lorenz, 2018).

Scholarship is also becoming an increasingly collaborative enterprise, which is reflected in a rise in multiauthored publications as well as the number of authors per publication (Knudson, 2017). While such collaborative efforts can bring together diverse perspectives and skill sets that result in stronger research (Hunter & Leahey, 2008), challenges also exist relative to managing group dynamics in team environments (Wu, Wang, & Evans, 2019). These challenges persist beyond the design and conduct of research and into the authorship process, including the management of and response to referee comments through manuscript review and revision. In an effort to manage some of these tensions, the purpose of this research note is to explicate one systematic, phasic, and replicable approach that has been shown to facilitate manuscript revisions across group sizes and that has particular application for mentoring doctoral students and early career academics.

Overview of the Manuscript Review and Revision Process

When an author submits a manuscript to an academic journal, it is first screened by the editorial team who considers if it fits within the scope of the journal and is of a high enough quality to merit consideration for publication. Manuscripts that do not pass this initial screening will be rejected without review. If the manuscript is deemed relevant to the journal, editorial team members may check it with reference to the journal reference and style guide and ask authors to make necessary changes before further consideration. Manuscripts that pass initial screening are sent to peer reviewers who are asked to evaluate its quality and provide recommendations for improvement (Kirk et al., 2014). These referees are generally selected based on their experience with the area of research and the employed methods (Gabbai & Chirik, 2018), although finding qualified reviewers can be a challenge for journal editorial teams.

Once this initial review is completed, the authors will receive a decision letter from the journal editorial team (Kirk et al., 2014). This letter will likely provide some context for the review decision and a general statement about what is expected should a revision be invited (Annesley, 2011). Most journals have editorial decision structure to communicate the results of the review decision, and when applicable, the level of revision expected (Elliott, 2018). The Journal of Teaching in Physical Education, for example, uses “Accept,” “Minor Revision,” “Major Revision,” and “Reject” decision options. When inviting a revision, many editors and associate editors will point to the reviewer feedback they believe merits the most attention and, in some cases, add further commentary or requests for revision (Elliott, 2018).

Ideally, the review process is not only beneficial to the journal by serving as a quality control mechanism for publication but also provides meaningful feedback to help the authors improve their work (Gabbai & Chirik, 2018). Nevertheless, the review process is far from perfect and has faced its share of scrutiny (Smith, 2006). As with most social processes, peer review is not free from bias, and reviewers can make mistakes. Reviewers’ subjectivities and personal allegiances may compromise an unbiased review, particularly if the scholarship questions their own work or preferred methods and theories (Frishammer & Thorgren, 2018). Manuscript review can therefore be conceptualized as a dynamic and unpredictable dialog between three parties: (a) the authors, (b) the editorial team, and (c) the reviewers. This conversation is not always smooth and can sometimes include conflicting advice and guidance without clear direction related to the path that should be taken (Frishammer & Thorgren, 2018).

With this in mind, manuscript review has been described as an integrative negotiation whereby authors work with reviewers and editors to refine manuscripts to make them more suitable for publication (Liu, 2014). An editorial decision that invites revision initiates this negotiation, and then authors work with editors to reach either a compromise that leads to publication or ultimate rejection. Inexperienced authors may be tempted to send the paper elsewhere when confronted with a long list of criticisms (Conn, 2007). They may wrongly assume that a journal is unlikely to accept a revised version of a paper that received a negative review or may question their ability to meet the challenges of the revision. Persistence is important for authors, and many manuscripts invited for revision will eventually be accepted for publication (Conn, 2007). Switching to a different journal, on the other hand, can slow down the process because the manuscript is subject to another peer review process, which may slow publication. It is likely to be read by different reviewers who could present very different advice.

A Collaborative Approach to Managing Journal Revisions

There are a variety of methods for coordinating the revision process, and many authors develop personalized approaches that work for their particular style. At the same time, given limited intentional training related during graduate education (Lorenz, 2018), authors may struggle to identify strategies that work for them. This is compounded by the limited number of systematic approaches for managing manuscript revisions in the published literature. Agarwal, Echambadi, Franco, and Sarkar (2006) present one such method using the acronym REAP Rewards for recommending that authors read the reviews, experience the emotions associated with the review decision, and arrange the reviewer comments into groups of similar critiques, before parsing out the revision responsibilities. The researchers then revisit the manuscript, evaluate each comment, write the responses, and argue among themselves to push deeper understanding of the issues. Finally, authors rewrite the manuscript, direct reviewer attention to the responses, and submit.

While we believe that there is no one correct way to manage manuscript revisions, further describing processes through which authors approach the review experience is an effective way to make tacit knowledge more explicit. Based on our experiences publishing research in academic journals, we have developed one such process that we offer here as a suggestion for authors new to academic publishing and those working in research teams. The steps we propose include (a) read, set aside, and return to the reviewer comments; (b) document initial reactions to comments; (c) collectively review the comments and decide upon direction; (d) coordinate revisions to the manuscript; (e) craft final response statements; and (f) prepare a resubmission cover letter to the editor. Further, we find it helpful to assign someone to lead the revision process. In our experience, this is typically a responsibility taken by the first author or senior author, but we refer to this role as the "lead researcher" in subsequent sections.

Read, Set Aside, and Return to the Reviewer Comments

Receiving an initial editorial decision on a manuscript, particularly one that suggests significant revisions or notifies the authors of rejection, can be frustrating for authors and evoke an emotional response. Rather than beginning the revision right away, read through the reviewer comments and step back for a few days to allow time to process (Annesley, 2011; Frishammer & Thorgren, 2018). This can be thought of as a cooling off period (Kotsis & Chung, 2014; Shaw, 2012). It is, therefore

good to give team members an opportunity to read the decision letter and share their initial reactions and opinions before beginning the review.

Once the authorship team has had a chance to experience and process emotions evoked through the decision letter, it is time to revisit the comments with a more critical eye. We suggest beginning this process by rereading each comment from the reviewers and editor (Nahata & Sorkin, 2019). Pay special attention to the most critical comments and anything specifically stressed by the reviewers and editorial team as adequately addressing them will be critical to getting the manuscript accepted (Frishammer & Thorgren, 2018). It may be helpful for authors to take notes to document any reactions they have as they revisit the comments as well as ideas for moving forward with revision. These will prove helpful when developing an initial response document in the next phase of the manuscript revision process.

Document Initial Reactions to Reviewer Comments

Next, it is time to begin documenting and organizing team members' initial responses to the reviews. A variety of approaches can facilitate this communication and discussion at the beginning of the revision process. Typically, we approach this process by developing a table in a shared online document (e.g., Google Doc) in which we list (a) the comments; (b) which reviewer made them (e.g., Reviewer 1, Reviewer 2); (c) our initial impressions and ideas for addressing the comments through revision; and (d) space to assign revision responsibilities (see example in Table 1). The lead researcher takes the responsibility for developing this table and organizing reviewer comments so that other team members need only add their responses. It is a good reviewing practice to itemize comments for the authors to make them easy to navigate (Bankovic et al., 2020). If the reviewers have not provided comments in itemized lists, however, authors should consider taking such an approach at the beginning of the revision process (Conn, 2007). We also recommend integrating the reviewer's comments, so they follow the flow of the manuscript, with any overarching comments that apply to the manuscript generally collected at the beginning or end of the table so that the responses can be reviewed as the manuscript is read. Alternatively, some authors prefer to list the comments in order for each reviewer separately to make it easier for the reviewers to follow the comments they have individually provided.

Once the items have been organized and itemized in the table, the lead researcher assigns each member of the research team a different format text (e.g., bold, bold italics, italics; different colors of highlight) to use in documenting their initial responses to the reviews, perhaps drawing from notes taken during initial reads of the manuscript. The lead researcher typically provides comments related to each itemized piece of feedback first using the format of texts assigned. The online document is then shared with other members of the research team who are invited to review the comments, reflect on their own initial thoughts, and document their reactions in table. In cases where they agree with the plan laid out by the lead researcher relative to individual comments, team members simply write "agree" for documentation purposes. We find that taking such an approach helps to document both agreement and disagreements relative to approaching the reviewer comments while also providing a shared space for team members to document any lingering frustrations related to the reviewer comments.

Table 1 Example of Initial Responses to Reviewer Comments Captured in an Online, Shared Document

Manuscript title (manuscript ID number)		
Comments	**Response**	**Responsible**
When responding to the reviewer comments you have received, do also consider your review of existing literature. A wealth of articles in previously published issues of [this journal] and other in the field may help to further support, clarify and refine your thoughts and as such, should be referenced and cited appropriately in your paper. (Editor)	Noted. Hopefully, the reviewers provide more direct feedback and recommendations. Perhaps Coauthor 1 could help with this comment by doing a quick search of the literature. *Agreed—this could take some time to find supporting articles, though you may have better access than I do through my university.* ***Agreed***	Coauthor 1
Elaborate a bit on the codebook. Were there lots of codes, small amounts, how did they deduct from open to axial coding? Was selective coding conducted? (Reviewer 1)	We can most definitely do this, but my main concern is space. This journal has a pretty short word count requirement, which makes elaborating on methods difficult. I think we can meet the reviewer part way with this one and add some limited depth, but not much beyond that. I can take this one. *Agreed. Inserting a short sentence that elaborates on the codebook might suffice.* ***I agree that this could be helpful but am also really concerned about the word count. We will have to make a lot of cuts to address the reviewer's comments and I don't think this is a good place to add.***	Lead researcher
So what are the implications/suggestions for PETE doctoral programs to help with the transition to pretenure faculty member? (Reviewer 1)	I think this is a fair question. Maybe we can brainstorm a few things and then Coauthor 2 can draft a paragraph for us to include. ***Agreed*** *Agreed*	Coauthor 2

Note. Lead researcher = plain text; Coauthor 1 = italics; Coauthor 2 = bold italics; PETE = physical education teacher education.

Collectively Review Comments and Decide Upon Direction

Once each author has considered and documented their initial reactions to the reviewers' suggestions, the authorship team is prepared to meet and discuss and plan for the revision process in detail. The lead researcher is best positioned to guide this process as they will draft the majority of the responses to reviewers. At this stage, the coauthors can use the initial response document created in the previous step as an outline to guide the revision process. The authors should consider every comment made by reviewer, as well as the team members' initial reaction, and come to consensus on how to best proceed. For substantive changes, one author can be assigned with responsibility to revise the document in a manner that is agreed upon by the authorship team. The author with expertise in methodology, for example, may be assigned with the responsibility to improve the method section. Other assignments should be based on the skills of the coauthors and

their contributions to the initial draft of the manuscript, with the lead researcher likely taking the majority of the revision responsibilities. It may also be necessary for the leader researcher to revisit authorship on the manuscript. If the revisions taken by certain members of the team lead to them doing additional work, reordering of authorship may be appropriate. This aligns with more general recommendations related to viewing authorship as a fluid process rather than a firm decision made at the beginning of a project (Grobman, 2009).

Coordinate Revisions to the Manuscript

After reviewing comments and determining the direction for revisions, the lead researcher should coordinate the process of making agreed upon revisions. Each member of the research team should take turns editing the manuscript, one author at a time for version control. The lead researcher may go first in order to make the majority of the revisions before passing the document to coauthors for additional edits. Alternatively, author availability may drive the ordering or revisions. Changes in the manuscript should be marked using the track changes function, different color or highlighted text, or in bold type to make the changes easily identifiable (Bankovic et al., 2020). All text that is changed should be highlighted, not just text that was changed due to reviewer comments (e.g., editorial changes made by the authors in revisiting the manuscript; Gabbai & Chirik, 2018). Authors should be prepared to cut text to accommodate the reviewers' comments. Arguing that there is not space to accommodate reviewer recommendations is not often viewed as a legitimate reason to avoid making changes (Annesley, 2011). If authors think that their revision will require significant lengthening of the manuscript, it is wise to discuss this with the editor in advance (Conn, 2007).

After making updates to the manuscript, the research team member should also provide a response in the reviewer comments document explaining how the changes were made. We recommend using a different format text (e.g., bold/black text) to indicate the revision and response to comments have been finalized. Once all revisions have been made, the lead researcher should make edits throughout the manuscript and the response document for fluidity in voice and to address any lingering concerns. Revisions made in one section of a manuscript may require changes to other elements of the manuscript. Multiple readings and revisions to a manuscript will be necessary for consistency (Conn, 2007). The lead researcher can coordinate with individual team members to address any issues with the manuscript or communicate with the entire team to determine solutions.

Craft Final Response Statements

Once all coauthors have completed assigned tasks, it is important for the lead researcher to review the manuscript to ensure that the document is prepared for resubmission. This includes documenting changes made to the manuscript by highlighting new content and referring to line numbers where appropriate in the response to the reviewers. When responding to reviewers, it is recommended that reviewer comments are not summarized but instead quoted verbatim in the response table to avoid any misinterpretation (Conn, 2007). Reviewers should be provided with a clear road map for how the manuscript was updated in response to reviewer feedback (Kotsis & Chung, 2014). While numerous approaches exist (Elliott, 2018; Kirk et al., 2014), we recommend organizing reviewer comments in a table format that is built from the initial response to reviewers document developed previously (Table 2). There are four elements that should be addressed for

each reviewer comment, including (a) the reviewer's original critique, (b) the extent to which the authors agree, (c) how the authors have addressed this critique, and (d) where the relevant text can be located in the revised manuscript (Lorenz, 2018).

Table 2. Example of Final Responses to Reviewer Comments in Table Format

Manuscript title (manuscript ID number)			
Page	**Lines**	**Comments**	**Response**
6	124–127	Please describe what is meant by a panel study. (Reviewer 1) The authors outline the study protocol well and provide ample justification for their methods and decisions. I would have liked one or two additional sentences about longitudinal panel studies or panel studies in general as this was a new approach to me. (Reviewer 2)	Thank you for pointing this out. We agree that a better definition of a panel study was needed. We have added a sentence in the methods section to explain that a panel study is a particular type of longitudinal design.
8-9	173–174	Interviews completed: This is weird to include an average. Maybe give a range or refer to Table 1 for how many interviews each of the participants completed. (Reviewer 1)	Following reflection, we agree that including the average number of interviews in a qualitative study is a bit odd. Instead, we have followed the reviewer's advice and referenced Table 1.
12	246–248	The word excerpt [in reference to the source for quotations] is not needed throughout. (Reviewer 1)	We appreciate the reviewer's perspective but would prefer to keep the excerpt identifiers. As explained at the beginning of the results section, this identification tag is used to differentiate between the teacher educator interviews and the excerpts collected through previous interviews.

Note. Revisions to the manuscript based on reviewers' recommendations: Thank you for the opportunity to revise and resubmit this manuscript. Above we provide a table that details the specific changes made to the manuscript based on the reviewers' comments. Each line provides the page and line numbers where the change can be located along with a description of what was changed. Changes made to the manuscript based on the reviewer comments are underlined throughout the manuscript. Any typographical errors noted by the reviewers, as well as some that we identified in our own rereading of the manuscript, have been corrected and are underlined, but are not addressed in the table above.

Authors should bear in mind that peer review is a sociopolitical process that involves a power dynamic whereby reviewers have the position to recommend that a paper is either published or rejected (Liu, 2014). Authors should not be contentious when responding to reviews. These individuals are playing important, voluntary, and often unpaid roles that support the publication process (Annesley, 2011). Provide thoughtful, planned responses, particularly when disagreeing with reviewers, as it is important to rationalize and carefully communicate decisions (Kirk et al., 2014). Reviewers are human beings and sometimes they misinterpret or otherwise misunderstand parts of a paper. If reviewers make mistakes, point them out, but do so kindly. It is likely that the same reviewers will read the revised manuscript, which makes it important to respond to comments respectfully and with care (DeMaria, 2011).

Given the sociopolitical nature of the review process, we recommend that authors should not push back on too many reviewer comments. Again, we believe that the review process is best

viewed as an integrative negotiation, which means that both the reviewers and authors should be willing to compromise in some areas (Liu, 2014). Revisions that do not compromise the goals of the paper are usually worth making, even if the research team does not agree (Annesley, 2011). On the other hand, however, early career academics are sometimes tempted to compromise core ideas to address reviewer feedback. Advocating for author's prerogative when revisions are not necessary or shift away from the intent of the manuscript is an important skill to learn (Agarwal et al., 2006). It may be appropriate to suggest that the recommendation could be better addressed in subsequent publications, especially when the requested revisions would require the addition of more than a page of text (Kotsis & Chung, 2014).

Prepare a Resubmission Cover Letter to the Editor

After final response statements are complete and the manuscript is ready to be resubmitted, a member of the authorship team, usually the lead researcher, prepares a cover letter to the editor of the journal. The cover letter is only read by the editorial team (Nahata & Sorkin, 2019), and is a document that allows the authors to respond more candidly with regard to their impressions of the reviewer comments and to summarize the changes to the manuscript. It is also a place to address any points of tension among the reviewers and the approach taken. Reviewers do not always suggest the same changes to a manuscript, and sometimes give contradictory advice. This can be expected given that reviewers bring their own perspectives and subjectivities to the review process and should not frustrate the authors (Nahata & Sorkin, 2019). If the authors take one reviewer's suggestion over another, they should provide a thoughtfully written explanation and rationale. It is not advisable to say simply state that you are taking the "side" of one reviewer over another (Conn, 2007). This explanation can be placed in the response to reviewer's document included in the previous step and then unpacked further in the private letter to the editorial team.

Conclusions and Final Thoughts

The purpose of this research note was to explicate one systematic, phasic, and replicable approach that has been shown to facilitate manuscript revisions across group sizes and that has particular application for mentoring doctoral students and early career academics. Toward this end, we hope it may help authors in developing efficient processes for responding to peer reviews and to ensure a collegial and scholarly conversation among authors, reviewers, and journal editors. We have found the specific suggestions outlined herein to be useful in approaching manuscript revision, but other authors may choose different approaches in responding to reviewer comments. There are multiple processes and formats that can lead to a successful manuscript review. The specific process outlined in this paper may be useful to doctoral students, practitioners, or early career scholars who are not yet familiar with the practice of scholarly peer review. In addition, this may assist faculty who mentor doctoral students by providing a process to educate students how to approach peer review in a more explicit way.

While the primary purpose of this manuscript has been to describe an approach for manuscript revision, not all manuscripts submitted to academic journals are invited for resubmission. Rejection is a normal part of the academic process, and many journals reject the majority of manuscripts submitted. Receiving rejection decisions can be difficult for authors and may lead to feelings of frustration and resentment (Kotsis & Chung, 2014). While demoralizing, particularly for early career scholars who have not weathered the storms of rejection in the past,

having a manuscript rejected does not mean that it will never be published. In fact, one study found that 76% of papers submitted to a high impact journal were accepted, in that journal or another one, within the next 2 years (Okike et al., 2012). Authors are best able to maximize the chances of reaching an acceptance decision by critically considering and utilizing feedback they receive along the way. Accordingly, if a manuscript is rejected or the authors decide to forgo revisions and submit to another journal, pause to consider and make edits based on the reviewer comments before submitting (Annesley, 2011).

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