EDITOR'S NOTE

Your Article Benefits From A Compelling Conclusion

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ABSTRACT

In this era of Internet-based, open-access journals, the careful construction of a powerful conclusion section is vital to publishing an influential and highly cited paper. The most compelling opening paragraphs for the conclusion section clearly provides: (i) the overarching question that the study is trying to answer; (ii) a simplified statement about the method used to gather evidence; (iii) an unambiguously clear answer to the research question; (iv) a paragraph about why we as a community should care about these results; and (v) a specific listing of what the next fruitful steps are needed by the broader research community. By following this simply five-step formula, authors are much more likely to provide readers—and peer reviewers—with a compelling conclusion section that results in a more frequently cited and widely influential paper.

Keywords: Discipline-Based Education Research; Publishing

ith the wide proliferation of Internet-accessible journals, there are more articles to read than ever before to support your educational research. Instead of burying oneself among the dimly lit, dusty shelves of some library with a stack of printed journals to carefully read cover to cover, today's researchers are much more likely to skim articles on a computer or even a cell phone. As a result, the purposeful construction of every article's abstract is vitally important if that article is going to make a contribution to the scholarly landscape (Slater, 2016).

Nowadays, if an article's abstract is sufficiently compelling, contemporary researchers generally quickly advance to read an article's conclusion section before deciding whether or not to invest the time and intellectual to fully understand the all of an article's components. Unfortunately, many authors are exhausted by the time the get to the end of the initial article drafting process and dedicate far too little intellectual investment to making a sound, evidence-based conclusion that naturally leads to fruitful research inquiries for the future. In fact, the number one reason that article's get rejection recommendation by reviewers is that the evidence provided is not tightly aligned with the conclusions advanced. So just how does one go about meticulously constructing a conclusion section that powerfully conveys the bottom line of one's research?

For articles in the *Journal of Astronomy & Earth Sciences Education* (www.JAESE.org), and most other disciplinebased education research journals, the most compelling opening paragraphs for the conclusion section clearly state several things. The first is that the opening sentence restates the overarching question that the study is trying to answer. Most readers are reading your article in the same session they are reading a stack of other articles, and it is easy to get confused or lose track of one's place. As a result, authors would be well advised to restate the overarching research question or reason for the study so that readers know precisely what the conclusions about to be summarized are referring to. In the same way, the best papers provide in the conclusion a simplified statement about how the team went about trying to answer the question. This second component is important because the question, the method, the evidence, and the conclusion need to be aligned and helping readers see these study attributes together makes it easier to judge the quality of the study. The third component of a compelling conclusion is an unambiguously clear answer to the question. This statement should be written specifically with the busy reader in mind, because most people are reading your article are skimming the conclusion section and trying to decide whether or not to invest time in really understanding the details of the study presented in the article. The fourth component is perhaps the most important part of the conclusion section. This subsection needs to provide a compelling and coherent statement about why we as a community should care about these results. The implications of a study are not always obvious to the casual reader, who really does need to know why this work is critical to moving the field forward or providing insight to practioners.

Probably the weakest component to most conclusion sections is a statement about future research questions. This fifth and final component needs to provide a clear pathway to help researchers focus on what are the next fruitful steps the research community needs to take. One should note that this should not be, "repeat the same study with a larger sample size" as that isn't particularly useful to other researchers. Instead, providing future research questions are needed to drive the broader scholarly line of inquiry to the next step in understanding what is going on. By following this simply five-step formula, authors are much more likely to provide readers—and peer-reviewers—with a compelling conclusion section that results in a more frequently cited and widely influential paper.

REFERENCES:

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