

Publishing PER Articles in *AJP* and *PRST-PER*

The Physics Education Research (PER) community is fortunate to have two peer reviewed archival journals committed to publishing PER-related work. The purpose of this editorial is to help authors decide which journal is most suitable for their work and also to introduce a new option—publishing an article about a particular study in both venues. We first briefly describe each journal separately and then describe this new publication option.

American Journal of Physics

The *American Journal of Physics* (*AJP*) is published by the American Association of Physics Teachers. It was established in 1933 and publishes papers that meet the needs and intellectual interests of college and university physics teachers and students. *AJP* is a print journal with a total circulation of 7300.¹ It is also available in electronic form.

Although some of the earliest articles in Physics Education Research were published in *AJP*, the growth of PER in the late 1990s led the PER community to wish to develop PER into a more formal research discipline. *AJP* does not publish original research, and thus *AJP* was deemed to be inappropriate for manuscripts whose audience was other PER scholars. To accommodate the needs of the PER community to publish original research, the physics education research section was established and first published as a supplement to the *AJP* in July 1999, with Joe Redish as editor. After three years of publishing PER articles as an annual supplement to *AJP*, PER articles then became integrated into the regular *AJP* issues. PER articles in *AJP* are specifically reviewed by members of the PER community. Manuscripts are handled by the PER editor.

The original mission of the *AJP-PER* section still applies: “A primary goal of the PER Supplement is the documentation of what is known about physics teaching and learning for the physics instructor interested in providing his or her students with a more successful learning experience. A second goal is to increase the exchange of information and views among researchers in physics education.”²

Because *AJP* has a varied readership, articles in the PER section must not only represent high quality PER work but also be accessible to physicists interested in education without any special interest in PER. This broad interest criteria is used for all manuscripts considered for publication in *AJP*, and *AJP* encourages researchers in all fields of physics to submit articles to *AJP* about their work that are written for a broad audience of physicists.

It is important to note that the non-PER section of *AJP* also publishes articles related to physics teaching which do not necessarily have a PER focus. Because *AJP* is a print journal published for a general audience, it is typically neither desirable nor possible for authors to provide a complete enough description of their data or methods to allow for replication. It is important for articles to emphasize implications for instruction. A typical length for papers published in

AJP is about 5–6 pages, although there is no maximum length. The PER section has an acceptance rate of approximately 25% and an expected publication time of approximately 9 months from the time of submission. Authors submitting to the PER section follow the same submission process used for submissions to the non-PER section of *AJP*.³

Physical Review Special Topics-Physics Education Research

Physical Review Special Topics-Physics Education Research (*PRST-PER*) was established in 2005 to provide an archival research journal on the teaching and learning of physics. This online journal is part of the American Physical Society’s *Physical Review* series and seeks manuscripts that are aimed primarily at those who conduct research in physics education. Although physicists interested in education might find the information in the articles useful, they will find them filled with field-specific jargon. Presentations of curriculum development and new teaching techniques, for example, are not appropriate unless there is a strong, explicitly discussed basis in PER. Theoretical papers may be more appropriate for *PRST-PER* than for *AJP*. The research described should advance the field in some way and should be sufficiently detailed as to permit replication. *PRST-PER* has an acceptance rate of 56%.

PRST-PER is a purely electronic journal and currently averages 750 article downloads per month. Because it is online, it is particularly suited to papers accompanied by large amounts of data, such as interview transcripts or even video clips, which can be archived on the journal’s website. Another advantage of electronic publishing is the rapid turnaround time once a manuscript is accepted. The current average time from submission to publication is 4 months. *PRST-PER* is also open to short papers describing notable results that are in need of quick publication and are either related to an earlier published work or are part of a larger study that will be published in the future.

A suggested publication option

In the academic world it is generally frowned upon to publish the same results from the same research study in two different journal articles. Thus, many PER researchers believe they have to choose between publishing their work in *AJP* or *PRST-PER*. Publishing in *AJP-PER* means reaching a larger audience, consisting of many non-PER physics educators. Thus, such articles have a better likelihood of influencing practice. However, these articles must also be accessible to a large readership. Publishing in *PRST-PER* means being able to present a complete and detailed research study

that can satisfy the high standards of the PER community. Such articles can help to advance the field of PER; however, they are less likely to be read by non-PER physics educators, and so implications for practice might not reach most practitioners.⁴

It is not always productive for PER researchers to have to choose between these two publication options. Thus, we encourage PER researchers to consider submitting a separate but closely connected paper to each journal describing high quality research if it is relevant to both the PER and non-PER communities. The article in *PRST-PER* should describe the study in detail and be aimed at other PER researchers. The article in *AJP-PERS* should present the study in a manner that is accessible to a typical physics educator. The article of the pair that is published second should explicitly reference the first article and describe the different purposes of the two articles.

We look forward to receiving your manuscripts and invite you to contact either of us if you have questions or suggestions.

¹AAPT, *AAPT 2009 Media Kit*, AIP Advertising, Melville, NY (2009), <www.aapt.org/Publications/upload/2009_Media_Kit-2.pdf>.

²For the complete mission statement, see <www.kzoo.edu/ajp/docs/pers.html>.

³For details, see <www.kzoo.edu/ajp/>.

⁴The journal's electronic, open access nature probably results in more non-PER physics faculty reading it than if there was a subscription cost.

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AAPT Online Journal:
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