

**EDITOR'S NOTE**  
**Advantages of JAESE's Open-Access Strategy**

There has been considerable debate in recent years—some well informed and others not so well informed—about the advantages and disadvantages of publishing in online, open-access journals as compared to traditional, subscription-based, print journals. For many professional societies, traditional, subscription-based, page-charge funded, print journals have served as an important service that societies can enthusiastically provide to their members, as well as provide societies with a healthy stream of financial revenue. At the same time as providing revenue to run a society, society members have been able to provide important service to the broader professional community by publishing their own scholarship and conducting peer reviews of others' research. By far, the majority of a journal's cost has been born by libraries paying hefty subscription fees.

In contrast to traditional publishing, open-access journals provide the scientific community with a different model. Whereas much of the “authoring” and “reviewing” is nearly identical to that of traditional publishing, the stark differences are in access and revenue (Slater, Slater, Heyer, & Bailey, 2015, pp. 107-109). Perhaps most importantly, traditional journals can only be read by those who have paid a subscription through a society membership or work at an institution who has a library who has paid a hefty subscription price for its faculty to access a journal. When journal articles can only be accessed by those who have paid a fee, they are commonly referred to as being behind paywall. This significantly limits any individual article's readership to those who have paid a subscription or to those who have a library who has paid.

Open-access publishers, in contrast, provide articles to the broader scientific community, without any paywall, subscription charges. Instead, articles are provided as PDFs through open-access journal websites and through no-cost gateways such as Google Scholar, Research Gate, or AcademiaEDU. The cost of copy editing and long-term curation is covered by nominal fees to authors or their institutions on a per article basis, rather than through a library-supported subscription service. In recent months, traditional publishers have responded by starting to offer authors and their institutions an opportunity to pay an additional fee—usually several thousand dollars—to make their journal articles available as open-access to those who do not have subscription access.

The bottom line reason this is important is that open-access versus paywall articles competition has been going on for long enough that one can answer the question, “which type of article is cited more often?” This is a critical question because the most important thing to most scholars is how often is their work read and how often is their work cited by other community members—and, naturally, scholars really do want their work to be read! MacCallum & Parthasarathy (2006) found that comparing a small sample of articles, they found that articles behind paywalls are not read, nor cited, as often as those articles which are not behind paywalls. This past month, Niyazov and colleagues (2016) considered a sample of more than 30,000 papers and found that open-access papers receive an astounding 51% more citations after three years and nearly 70% more citations after five years. If authors are looking for a pathway to larger citation rates when they are going through a performance review, using open-access journals are critically important (Slater, 2015).

Undeniably, there have been a number of sham open-access publishing ventures pop up around the world. These so-called predatory publishers simply put up a website and offer to quickly publish articles for a fee. However, simply because predatory publishers exist in the open-access realm does not mean that open-access publishing is universally bad (Slater, 2014). Instead, it is a relatively easy argument to make that articles which are highly cited are probably intellectually worthwhile by and large. And, if articles appearing in open-access journals are systematically getting more citations, then the scholarly ecosystem appears to be somewhat self-policing in this regard.

Open-access publishing is definitely a permanent part of academic publishing. Given that even the most traditional publishing houses are finding that most of their articles are being read online rather than in print, the distinction of a print journal versus an online only journal has all but disappeared. I would urge scholars to consider the quality of

what similar articles are currently appearing in any particular journal when deciding which of the many journal venues is currently the best vehicle to use for publishing one's scholarly endeavors.

Timothy F. Slater, Ph.D.  
*Editor-in-Chief*

## REFERENCES

- MacCallum C. J., & Parthasarathy, H. (2006). Open access increases citation rate. *PLoS Biol* 4(5): e176.  
DOI: 10.1371/journal.pbio.0040176 from:  
<http://journals.plos.org/plosbiology/article/asset?id=10.1371%2Fjournal.pbio.0040176.PDF>
- Niyazov, Y., Vogel, C., Price, R., Lund, B., Judd, D., Akil, A., ... & Shron, M. (2016). Open access meets discoverability: Citations to articles posted to Academia. edu. *PloS one*, 11(2), e0148257.
- Slater, S. J., Slater, T. F., Heyer, J., & Bailey, J. M. (2015). *Discipline-based Education Research*, 2<sup>nd</sup> Edition. Hilo, HI: Pono Publishing.
- Slater, T. F. (2014). Editor's Note: JAESE's Initial aim, scope and business model. *Journal of Astronomy & Earth Sciences Education*, 1(1), i.
- Slater, T. F. (2015). Editor's Note: JAESE's Appropriateness for tenure & promotion decisions. *Journal of Astronomy & Earth Sciences Education*, 2(1), i.

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