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Article-Level Metrics and altmetrics: New Ways to Measure the Impact of Your Research

by Andrée J. Rathemacher

A shared concern of faculty, administrators, and funders is how to measure the impact of scholarly research. Traditionally, impact has been measured through citations, specifically citations from journal articles to journal articles. However, since citations to individual articles tend to be slow to accumulate, as a proxy we have used the aggregate impact of the journal in which the article appeared — the Journal Impact Factor.

Yet the Journal Impact Factor is not an appropriate tool for assessing the impact of individual articles. This is so for a number of reasons, including the fact that most citations accrued by a journal are to a small number of the journal's articles; the article under evaluation may or may not be highly cited. Also, Journal Impact Factors can be “gamed” by editorial policy, for example through requiring authors to cite other articles that appeared in the journal or commissioning review articles which tend to receive a lot of citations. A movement against the inappropriate use of Journal Impact Factors is gaining momentum. In 2013 the San Francisco Declaration on Research Assessment (DORA) was released. It offered this general recommendation: “Do not use journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles, to assess an individual scientist's contributions, or in hiring, promotion, or funding decisions.”

But what is the alternative? Fortunately, now that research and researchers have moved online and we are no longer limited by the constraints of a print-based world, it is possible to measure the impact of scholarship in new ways. We can use Article-Level Metrics to quantify how individual articles are being used and altmetrics tools to extend the measurement of impact beyond journal articles to include books, book chapters, datasets, computer code, presentation slides, blog posts, websites, and other scholarly outputs.

A growing number of journals and publishing platforms are making Article-Level Metrics available. For example, Article-Level Metrics are provided for every article published by the Public Library of Science (PLOS). Metrics include total article views and downloads; citation data from SCOPUS, Web of Science, CrossRef, and Google Scholar; bookmarks in Mendeley and CiteULike; and mentions on blogs, Facebook, and Twitter. *Nature* offers similar metrics from Altmetric.com, while journals published on the HighWire platform incorporate metrics from ImpactStory. Along the same lines, URI faculty who have archived their articles in DigitalCommons@URI or SelectedWorks receive an email each month with the number of times each article has been downloaded.

Unlike Article-Level Metrics, altmetrics measure the impact not only of journal articles but a diverse array of scholarly products. Altmetrics can free scholars to experiment with and receive credit for alternative outputs such as digital humanities projects, open data sets, computer code, and blogs. And unlike straight citation counts, altmetrics measure impact beyond the academy (for example through Wikipedia citations, media mentions, Delicious saves, Tweets, and Facebook posts). This ability to measure public as well as scholarly impact is valuable to institutions (especially land-grant institutions like URI) and research funders in helping them to gauge the real-world impact of the scholarship they support.

So what can faculty at URI do to take advantage of Article-Level Metrics and altmetrics? To begin, register for an ORCID identifier (<http://orcid.org/>). This is a unique author ID that distinguishes your work online from that of researchers with the same or similar names. To help track your Article-Level Metrics, create an author profile on Google Scholar Citations (<http://scholar.google.com/citations>).

To track altmetrics for your scholarship, set up a profile on the free, open-source altmetrics tool ImpactStory (<http://impactstory.org/>). ImpactStory will allow you to track the impact of all of your online research products, specifically to what degree they were recommended, cited, saved, discussed, and viewed by scholars and the public. You can also embed ImpactStory's code into your online CV or website.

Finally, to increase and broaden the impact of your scholarship, make sure you make an open access version of your articles available by depositing your work in DigitalCommons@URI per the URI Open Access Policy (<http://uri.libguides.com/oapolicy>).

Further reading

"San Francisco Declaration on Research Assessment (DORA)," 2013.
<http://www.ascb.org/dora/>

Jason Priem, "Scholarship: Beyond the Paper," *Nature* 495 (28 March 2013).
<http://dx.doi.org/10.1038/495437a>

Jason Priem, et. al. "altmetrics: a manifesto," 2010. <http://altmetrics.org/manifesto/>

Greg Tananbaum, "Article-Level Metrics: A SPARC Primer," April 2013.
<http://sparc.arl.org/sites/default/files/sparc-alm-primer.pdf>