University of Massachusetts Medical School

eScholarship@UMMS

Library Publications and Presentations

Lamar Soutter Library

2018-02-07

Scholarly Productivity and Impact Metrics Roundup

Rebecca Reznik-Zellen
University of Massachusetts Medical School

Follow this and additional works at: https://escholarship.umassmed.edu/lib_articles

Part of the Publishing Commons, Scholarly Communication Commons, and the Scholarly Publishing Commons

Repository Citation

Scholarly Productivity and Impact Metrics Roundup

Hello! My name is Rebecca Reznik-Zellen and I am a librarian at the University of Massachusetts Medical School's [Lamar Soutter Library](#). If you are submitting a grant application, preparing your resume/curriculum vitae (CV) or Annual Performance Review (APR), or if you are going up for tenure or promotion, you may be thinking about how best to quantify your academic or scholarly performance as one way to showcase your experience. While there is no shortage of metrics that can be used to illustrate your contributions, it is sometimes puzzling to know which metrics to use, when and how to use them, or if you should rely on quantitative metrics at all. This post will review standard productivity and impact metrics, where to find them, and approaches for using them.

Lessons Learned

Scholarly metrics can be incredibly useful in illustrating the influence of your scholarly record, but if they are used carelessly or without context, they can become meaningless numbers. So what metrics should be used for what purposes? The following table gives an overview of different metrics, the dimensions of scholarship that they can help quantify, sample measures, and sources of these metrics.

Dimension	Uses	Example Metrics	Entity	Source
Productivity	Demonstrate volume of work over time	Scholarly outputs, outputs over time, output types, subject areas	Individuals, Groups, Journals	Scopus; Web of Science; Google Scholar
Impact	Gauge influence of scholarship	Citation-counts, citations per publication, cited publications, h-indices, outputs in top percentiles, journal impact factors	Articles, Individuals, Groups, Journals	Scopus; Web of Science; Google Scholar
Collaboration	Illustrate collaborative or interdisciplinary scholarship	Co-authorship, collaboration by sector or by institution	Individuals, Groups	Scopus; Web of Science; Google Scholar
Attention	Document where, how, and by whom scholarship is shared and discussed online	News media mentions; blog mentions; Tweets and Twitter demographics; Facebook, Google+, LinkedIn; Research highlights (IE: F1000); policy; video; Mendeley readers; Altmetric.com attention score; download counts	Articles, Individuals, Groups, Journals	Altmetric Explorer for Institutions; Impact Story Profiles; institutional repositories; journal websites
Openness	Catalog the percentage of your works that are publicly accessible	Open Access status of publications; number of OA publications; percentage of works that are OA	Articles, Individuals	Impact Story Profiles; Scopus; institutional repositories

Hot Tips

- Follow the norms of your discipline and institution when including metrics on your CV or APR; some frown on including h-indices or citation counts, some use them sparingly, others integrate them creatively to highlight the most impactful work in otherwise dense documents.

- Indicate the source database for quantitative metrics as some databases (e.g., Scopus, Web of Science, and Google Scholar) will produce different numbers based on the content they index.
- Always use qualitative and quantitative metrics together when telling the story of your scholarship.
- Look behind the numbers to see where and by whom your work is being cited or shared; this qualitative information is often more telling than a simple statistic.

Rad Resources

The following tools can help you gather scholarly metrics on productivity and impact, collaboration, openness, and online attention.

- **Productivity and Impact:** Scopus and Web of Science (if provided by your institution) or Google Scholar (free) provide data on the number, type, and source of your publications and can also provide (to differing degrees) statistics such as h-indices and citation counts.
- **Collaboration:** Try Scopus Author Analysis to see who your most frequent collaborators are. Google Scholar also provides information on coauthors.
- **Attention:** Use Altmetric Bookmarklet (free) or Altmetric Explorer for Institutions (if provided by your institution) to discover the online attention your scholarship receives.
- **Openness:** Try Impact Story Profiles to determine the percentage of your outputs that are Open Access.
- **Broader Impact:** Explore the Becker Model to see how broad your scholarly impact is.

How do you document impact within your field? Use the comments section below to share your own preferred metrics and strategies for documenting your scholarly performance. And, as a reminder, you may wish to contact your local librarian if you want help understanding different metrics and how to use them.