

tools to manage and assess scholarship: altmetrics & Creative Commons

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- + Wrap up

learning objectives

- + Understanding of history, development, and potential application of altmetrics and Creative Commons
- + Familiarity with different altmetrics tools & CC licenses and their application and usefulness

the challenge: what is it we're trying to measure?

What is the impact of the research?

Is it making a scholarly impact?

Is it contributing to the public good?

[And what does it mean to do so? Policy & practice?]

Who is reading it?

Who is interpreting and commenting on it?

What is the quality of the research?

Who thinks it's valuable and/or valid?

Who thinks it's hogwash?

Is it broadly valuable? Is it a game changer? Is it part of the canon?

How does the discipline affect the range/shape of impact?

bibliometrics: citation-based metrics

Author-level:

- + H-Index
- + i10-index

Item-level:

- + Citation impact

Journal-level:

- + Eigenfactor
- + Impact factor

what's wrong with the impact factor?

THE CHRONICLE OF HIGHER EDUCATION

May 17, 2013

"The impact factor data ... have a strong influence on the scientific community, affecting decisions on where to publish, whom to promote or hire, the success of grant applications, and even salary bonuses. Yet, members of the community seem to have little understanding of how impact factors are determined, and, to our knowledge, no one has independently audited the underlying data to validate their reliability."

-Mike Rossner, Heather Van Epps, Emma Hill, "Show me the data," (2007) [Research cited in altmetrics manifesto]

May 16, 2013

Researchers and Scientific Groups Make New Push Against Impact Factors

By Paul Basken

More than 150 researchers and 75 scientific groups issued a [declaration](#) on Thursday against the [widespread use of journal "impact factors,"](#) blaming the practice for dangerous distortions in financing and hiring in science.

impact factor, cont.



Recommendations for funding agencies, institutions, publishers, researchers, & institutions that provide metrics.

Themes:

Includes: recommendations that metrics be contextualized with variety of journal-level measures, that article-level metrics be made available, that researchers “Use a range of article metrics and indicators on personal/supporting statements, as evidence of the impact of individual published articles and other research outputs”

Research Excellence Framework in the UK (<http://blogs.bmj.com/bmj/2013/05/07/richard-smith-the-irrationality-of-the-ref/>)

- + Monolithic
- + Mysterious
- + Misapplied

altmetrics manifesto: vision

+ In growing numbers, scholars are moving their everyday work to the web. Online reference managers Zotero and Mendeley each claim to store over 40 million articles (making them substantially larger than PubMed); as many as a third of scholars are on Twitter, and a growing number tend scholarly blogs.

These new forms reflect and transmit scholarly impact: that dog-eared (but uncited) article that used to live on a shelf now lives in Mendeley, CiteULike, or Zotero— where we can see and count it. That hallway conversation about a recent finding has moved to blogs and social networks— now, we can listen in. The local genomics dataset has moved to an online repository—now, we can track it. This diverse group of activities forms a composite trace of impact far richer than any available before. We call the elements of this trace altmetrics.

-altmetrics manifesto

altmetrics manifesto: critique

+ We rely on filters to make sense of the scholarly literature, but the narrow, traditional filters are being swamped. However, the growth of new, online scholarly tools allows us to make new filters; these altmetrics reflect the broad, rapid impact of scholarship in this burgeoning ecosystem.

+ Three main traditional filters as: **peer review; citation counts; JIF.**

+ peer review = "slow, encourages conventionality, and fails to hold reviewers accountable. ... fails to limit the volume of research."

+ citation counting = "useful, but not sufficient ... slow ... narrow ... influential work may remain uncited ... neglect impact outside of the academy, and also ignore the context and reasons for citation."

+ JIF = "incorrectly used to assess the impact of individual articles ... trade secret ... significant gaming is relatively easy."

Core issues: metrics are:

+ slow

+ insufficiently granular

+ opaque

+ neutral "flavor" of citation

+ closed

+ neglectful of impact beyond the academy

+ tied to traditional publication products, not taking new diversity of output (dataset, website, blog) into account

altmetrics

- + altmetrics = alternative metrics
 - + based on the Social Web
 - + crowdsourced peer review
 - + sometimes seen as subset of webometrics
-
- + + usage, captures, mentions, social media, citations + +

are you altmetrics?

- analytics
- article-level metrics
- impact factor
- citation count
- # page views
- # twitter mentions
- Hirsch index

analytics in the libraries

Statistics

Total Visits

Field Notes and Specimen Catalog, Numbers 1-54 (1933) Views
4593

Total Visits Per Month

	November 2012	December 2012	January 2013	February 2013	March 2013	April 2013
Field Notes and Specimen Catalog, Numbers 1-54 (1933)	1824	49	26	19	27	1957

File Visits

TCWC_006.pdf Views
3366

Top country views

	Views
United States of America	4190
China	32
United Kingdom	12
Russian Federation	9
France	6
Netherlands	6
Germany	3
Ukraine	3
Brazil	2
Canada	2

Top cities views

	Views
College Station	2191
Hearne	1807
Redwood City	41
Bryan	22
Washington	16
Beijing	11
Palo Alto	11
Beverly Hills	9
Houston	8
San Jose	8

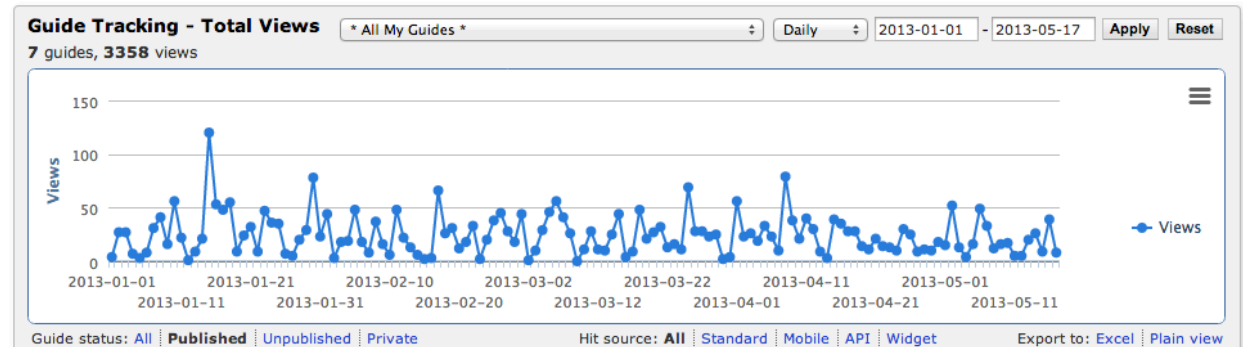
[University Libraries](#) » [Guides](#)

Statistics

System-wide usage statistics and detailed statistics for all your guides.

Guides Links

[Click here to view statistics prior to 2012-07-01](#)



who's using altmetrics?

Collecting:

- + Altmetric
- + ImpactStory
- + Plum Analytics
- + ScienceCard
- + PLoS
- + Mendeley
- + SlideShare
- + Wikipedia
- + Figshare
- + CiteULike
- + Facebook

Publishing:

- + PLoS
- + BioMed Central
- + The Rockefeller University Press
- + Sage Open
- + mBio
- + [PeerJ](#)
- + Primo

impact “flavors”

Research that looks into clustering of altmetrics:

- + Read and cited
- + Read, saved, and shared
- + Popular hit
- + Expert pick
- + Not picked up by metrics

+Priem, Piwowar, and Hemminger, “Altmetrics in the Wild,” 2012.

tracking content in real time



This page mashes up alt-metrics data from [Altmetric](#) with articles from the [Public Library of Science \(PLOS\)](#). Check which articles are seeing the most buzz from social media sites, newspapers and in online reference managers.



Browse articles with mentions in the past:

1d, 3d, 1w, 1m, 3m or all time

In these journals (all by default):

- PLoS One
- Genetics
- Computational Biology
- Pathogens
- Medicine
- Biology
- Neglected Tropical Diseases

Viewing 5,800 PLoS articles mentioned sometime in the past 1m. Hover over a score for more information, click it for details.

The screenshot displays a list of PLoS articles with their Altmetric scores and social media activity. A tooltip is visible over the first article's score.

Article Title	Journal	Altmetric Score	Tweeted by	On Facebook Pages	Mentioned in Google+ posts	Reddited by	Blogged by
An Introduction to Social Media for Scientists	PLOS Biology	1076	1279	55	6	2	6
Getting a Grip on Memory: Unilateral Hand Clenching Alters Episodic Recall	PLOS ONE	198					
Relaxation Response Induces Temporal Transcriptome Changes in Energy Metabolism, Insulin Secretion and Inflammatory Pathways	PLOS ONE	157					
Malaria Infected Mosquitoes Express Enhanced Attraction to Human Odor	PLOS ONE	155					
Scientific Foundations for an IUCN Red List of Ecosystems	PLOS ONE						

altmetrics v. >/< + bibliometrics



“So-called ‘alternative metrics’ or ‘altmetrics’ build on information from social media use, and could be employed side-by-side with citations—one tracking formal, acknowledged influence, and the [other] tracking the unintentional and informal ‘scientific street cred.’ Altmetrics could deliver information about impact on diverse audiences like clinicians, practitioners, and the general public, as well as help to track the use of diverse research products like datasets, software, and blog posts. The future, then, could see altmetrics and traditional bibliometrics presented together as complementary tools presenting a nuanced, multidimensional view of multiple research impacts as multiple time scales.”

-Jason Priem, Heather A. Piwowar, and Bradley M. Hemminger, “Altmetrics in the Wild: Using Social Media to Explore Scholarly Impact” (March 2012).

obstacles

- + open (and shifting) availability of these metrics
 - + shifting interpretation of these metrics (“in their infancy”)
 - + disambiguation (versions, authors)
 - + lack of metrics for some items (book chapters)
 - + distrust from the academic community [Binfield: academic community thinks they understand, trust the impact factor; is this shifting with DORA?]
 - + “much of the data collected at the moment indicates *the attention paid to* rather than the *quality* of different scholarly works...”
- Jean Liu and Euan Adie (Altmetric)

altmetrics + CC

Open Science / Open Access / Open
Data / Open Labs / Citizen Scientists

+ implicit connection to OA movement

+ [CC-Kiwi clip](#)

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Getting it Right on Rights: Simplifying, Harmonizing, and Maximizing the Openness of Rights in Digital Libraries around the World

Large-scale collections like the Digital Public Library of America, Europeana, Trove, and DigitalNZ have enriched the free web by making openly available tens of millions of items from libraries, archives, museums, and cultural heritage sites from their respective countries or continents. This burgeoning public commons is



Submitted by:
Dan Cohen
March 18, 2014,
14:55PM

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form into groups of 3-4

- + Test Creative Commons license selection
- + Adding metrics to your CV
- + Build profiles in ImpactStory
- + PLoS metrics assessment

Each group: elect a lightning-talk representative to give a 3-5 minute spiel about what you turned up

still interested?

NISO recently released a draft of its Altmetrics Standards Project White Paper and is looking for feedback. [Check it out.](#)

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