Measuring Research Output
Connecting to Faculty through Citation Metrics
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Metric Definitions

- **Journal Impact Factor**: the impact factor of a journal is the number of citations to articles in that journal (in Web of Science) in previous two years, divided by number of original research articles and reviews published by that journal in the previous two years.

- **Immediacy Index**: the average number of times an article is cited in the year it is published.

- **Journal Cited Half-Life**: the median age of the articles that were cited in the JCR year.

- **Eigenfactor Score**: calculated by eigenfactor.org, this measure differs from the Journal Impact Factor by taking into account the influence of the journal of the citing article.

- **Article Influence Score**: measures the average influence of a journal's articles over the first five years after publication.

- **H-Index**: measures both the productivity and impact of the published work of a scientist or scholar (a scientist has index h if h of his/her Np papers have at least h citations each, and the other (Np − h) papers have no more than h citations each).

- **altmetrics**: the creation and study of new metrics based on the Social Web for analyzing, and informing scholarship.

Strengths

- Quantitative information about output
- When used together, tools give a broad picture of the impact of journal publishing activity
- Widely used within academic departments to inform decisions of promotion and tenure

Weaknesses

- Two most popular tools only measure the work that they index
- Traditional tools don’t capture grey literature and other informal scholarly communication
- Coverage does not always include lifespan of author’s work due to date coverage of tools
- Developed to measure scientific scholarly publishing activity but now being applied to other disciplines where measures may not fit

Making Connections

- **New Faculty**
- **Women in Science and Engineering**
- **Research Profiles**
- **Institutional Repository**

altmetrics
http://altmetrics.org/manifesto

Total Impact

Reader Meter

Google Citations Profile
http://scholar.google.com/citations

Citation Metrics Guide
http://researchguides.library.syr.edu/citationmetrics