Impact of Research & Scholarly Works
Today’s Plan

• Demonstrate an understanding of the different types of metrics to demonstrate impact.
• Use resources in order to find the impact of journals, articles, and individuals.
What is Impact?

• Measure reflecting the influence or effect work has on a field of study or general population.
Why is impact important?

• Demonstrates the reach and potential influence of your research, work, and teaching.
• Allows others to learn from your work.
• Assists with tenure or promotion.
• Helps with grants applications and reporting.
• Tracks and improves engagement and collaboration.
• Other?
Caveats

• Take everything with a grain of salt!
• No tool is perfect.
• Every evaluating body is different.
• Departments and fields have different criteria for impact.
• This is the current status quo for impact, but it’s changing!
Article Impact: What?

• Citation Analysis: determines how many times an article has been cited and by whom.
  • One form of measuring an individual article’s impact.
• Altmetrics! More later.
  • Could include downloads, tweets, mentions, etc.
Article Impact: Why?

• Indicates if an article is widely read, known-about, and perhaps well-respected.
• Can be valuable for research leads.
Article Impact: Where to Find It?

- Google Scholar
- Web of Science
- ScienceDirect
- SciFinder Scholar
- ProQuest Databases
- Publons Score
- Pubpeer Comments
- PubMed iCite (Relative Citation Ratio (RCR))
Journal Impact: What?

- **Impact Factor**: measure reflecting the average number of citations to recent articles published in the journal.
  - **One** form of measuring of a journal’s impact.
  - From Journal Citation Reports.
  - Most well-known.
  - Journals with higher impact factors deemed to be more important (usually).

- Similar metrics from other databases.
- Journal acceptance rate.
Journal Impact: Why?

- Evaluate scholarly worth of a journal.
- Help scholar’s decide where to publish an article for maximum impact.
- Evaluation for promotion, tenure, and/or grants.
- Used by librarians during journal cancellations or purchases.
- Rank journals within a discipline.
  - Look at journals overall and in the field.
Journal Impact: Where to Find It?

- Journal Citation Reports (JCR)
- SCImago Journal & Country Rank
- Eigenfactor
- Cabell’s
- Harzing.com
- CiteScore
- Google Scholar Metrics
- Ranking lists by discipline
Book Impact: What?

- Number of times a book is downloaded and/or read
- Availability of the book (in libraries)
- Number of citations
- Recognition / Awards
- Textbook usage
- Book signings
- Translations
- Sales
Book Impact: Why?

• Evaluate scholarly worth and popularity of a book.
• Evaluation for promotion, tenure, and/or grants.
• Used by librarians during book purchases.
Book Impact: Where to find it?

- Reviews in journals, GoodReads, Amazon, and other sources
- WorldCat
- Google Scholar
- Information from the publisher
- Best seller lists
Researcher Impact: What?

• Attempts to measure both the productivity and impact of a scholar.

• **h-index**: Measures the influence of an author by counting the number of publications by an author and the number of times they are cited.
  • Most widely used to measure a scholar’s impact.
  • Highest possible number h, such that h paper has h citations.
  • You don’t have to figure it out, it’s calculated for you.

• **g-index**: adds more weight to highly cited articles.

• **i10-index**: number of publications with at least 10 citations
Researcher Impact: Why?

- Evaluate the impact of an individual.
- Reach of an individual’s work.
Researcher Impact: Where to Find It?

• Web of Science
• Google Scholar
• Scopus (via ScienceDirect)
• Publish or Perish
Altmetrics: What?

• Or “alternative metrics,” measures the use and importance of research using nontraditional methods of measurement.
• Still an evolving field of measures.
• Looks at the broad picture of research.
Altmetrics: Why?

• Ability to combine different kinds of data from multiple sources can give a fine-grained picture of an article’s influence.

• Slow pace of academic publishing means citations can take months or years to appear.

• Relevant speed of altmetrics means it can be a useful guide to current literature.

• New technologies mean new ways of disseminating research.

• Can show funders level of impact.
Altmetrics Impact: Where to Find It?

- Altmetric.com
- ImpactStory
- PlumX
- Social media


ImpactStory Example: https://impactstory.org/u/0000-0001-6728-7745; https://profiles.impactstory.org/u/0000-0001-9155-9683; https://profiles.impactstory.org/u/0000-0002-4517-1562
Altmetrics Sources

Can include...
  • downloads
  • page views
  • blogs
  • social media (Twitter, Facebook, Instagram, etc.)
  • media
  • public policy documents
  • Wikipedia citations
  • patents
  • multimedia
Additional Proof of Impact

- External letters with descriptions of impact
- Where and how work is used in the community
- Teaching
- Testimonials
- Grants
- Data
- Patents
- Code / software
Impact in the Arts and Media

- Venue
- Audience
- Audience Size
- Awards
- Times Performed
- Reviews
Telling Your Story

• Present your number within the context of your field when possible
• Define your terms
• Cite sources
• Be descriptive
  • Examples: http://beckerguides.wustl.edu/c.php?g=299569&p=2912018
Changing Landscape...

- San Francisco Declaration on Research Assessment: [https://sfdora.org/read/](https://sfdora.org/read/)
- “The outputs from scientific research are many and varied, including: research articles reporting new knowledge, data, reagents, and software; intellectual property; and highly trained young scientists. Funding agencies, institutions that employ scientists, and scientists themselves, all have a desire, and need, to assess the quality and impact of scientific outputs. It is thus imperative that scientific output is measured accurately and evaluated wisely.”
Training and More Info

- guides.auraria.edu/impactfactor
- guides.auraria.edu/publishyourresearch
- guides.auraria.edu/promoteyourresearch
- Metrics Toolkit: www.metrics-toolkit.org/
Questions?

Ask Us: library.auraria.edu/services/askus
Chat/IM: AskAuraria and on Auraria Library’s Website
Text: 303-848-8444
Email: library.eref@auraria.edu
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