An Evolution of Bibliometrics and Research Impact Services

Presentation for CNI Fall 2020 Virtual Meeting

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Presenters

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What are bibliometrics?

“Bibliometrics serve as one tool, among many, used by universities, funders, ranking organizations, and others to measure research outputs.”

Problem space:

- Tracking research, scholarship, creative activity
- Tell our story, promote, amplify
- Connecting research:
  - Researcher-to-researcher
  - External-to-researchers

Limitations

- Only part of the picture
- Dataset Limitations
- Discipline discrepancies
- Diversity Equity and Inclusion (EDI) in citation practice

Getting started with bibliometrics and research impact at the institutional level

- Calculate your academic footprint
- Strategic plan theme: Transformational Research
- Hired Bibliometrics and Research Impact Librarian
- Published “Whitepaper: Measuring Research Output Through Bibliometrics”

*Use of bibliometrics by government, funders, ranking groups*
*Provost established Working Group on Bibliometrics*
Raise your hand

- To your knowledge does your institution offer any bibliometrics services?
  - If you’re unsure, share that in the chat.
White paper and consultation

- Key messages
  - Work from a basket of measures
  - Involve those being measured
  - Appropriate use & limitations
  - Understand disciplinary cultures
  - Do not compare across disciplines

DOI: 10.13140/RG.2.1.3302.5680
New specialization: Bibliometrics and Research Impact Librarian

Key partnerships
- Institutional Analysis and Planning
- Office of Research
- Liaison Librarians

Key roles
- Campus strategic advice
- Data analysis & replication
- Education
- Vendor relationships
Why the library?

- Deep knowledge of bibliographic data and tools
- Expertise across various points of the research lifecycle and scholarly communication
- Awareness of disciplinary limitations
- Long history of liaising with both academic support units and faculties
- Viewed as “neutral” - no stakes in the impact data
Impact on the library

- Partnership building
- Raises profile on campus
- Engagement and opportunities
- Evidence based collection analysis
Enter in the Chat

For those institutions who have some formal bibliometrics service:

1) Where are the services centralized?
2) Who are your key partners?
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Working Group on Bibliometrics:

White Paper

2016

Research Metrics Framework – Supporting 2013-2018 institutional strategic plan research themes

2015-2017

Strategic Plan 2020-2025 Research Areas of Excellence

2019

Bibliometric Assessment Tools Report

2019

Strategic Plan 2020-2025 Research Areas of Excellence – Indicators

2020-2021
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Community of Practice (est. 2020)

- Informal
- Open to anyone at UWaterloo
- Training and sharing knowledge
- Presentation/discussion format
- Currently 35+ members, 13-16 ppl per meeting so far
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Community of Practice (est. 2020)

- Members identified learning from others (and their mistakes) was key
- Wanted a balance of training and discussion
- Specific topics and training needs discussed each meeting

- Presentations on:
  - Disciplinary metrics using SciVal
  - Recent articles on Bibliometrics
  - Methodologies generating metrics
  - History of bibliometrics at UW
  - Pure (CRIS – Current Research Information System)
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Expansion of bibliometrics skills across campus

Stakeholders
- WGB
- Office of Research
- Institutional Analysis & Planning

Centres & Institutes
- Waterloo Institute of Nanotechnology
- Water Institute
- Interdisciplinary Centre on Climate Change

Faculties
- Faculty of Mathematics
- Faculty of Engineering
- Faculty of Science
What we don’t do

- Individual level consultations – some exceptions
  - Most often this can be supported through liaison librarians, depending on complexity of the question and comfort level of the liaison.

- General instruction programs
  - this may change over-time. Ex. Development of asynchronous tutorials
Enter in the Chat

- What types of bibliometrics services do you offer?
THANK YOU

Questions?
Resources

- The White Paper, "Measuring Research Output Through Bibliometrics", provides a high-level review of bibliometrics, and provides recommended practices for working with bibliometric data. DOI: 10.13140/RG.2.1.3302.5680

- Bibliometrics and Research Impact Librarian, Job Description
  https://hr.uwaterloo.ca/jd/00006514.pdf

- BRI Guides from Uwaterloo -
  https://subjectguides.uwaterloo.ca/prf.php?account_id=12924

- The Bibliomagician Blog - https://thebibliomagician.wordpress.com/

- Discussion List: Lis-Bibliometrics
  https://www.jiscmail.ac.uk/cgi-bin/webadmin?A0=LIS-BIBLIOMETRICS