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

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Getting started with bibliometrics and research impact at the institutional level

- **<2011**: Calculate your academic footprint
- **2011**: Use of bibliometrics by government, funders, ranking groups
- **2012**: Strategic plan theme: Transformational Research
- **2012**: Provost established Working Group on Bibliometrics
- **2015**: Hired Bibliometrics and Research Impact Librarian
- **2016**: Published “Whitepaper: Measuring Research Output Through 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:

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
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<tbody>
<tr>
<td>2016</td>
<td>White Paper</td>
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<tr>
<td>2019</td>
<td>Strategic Plan 2020-2025 Research Areas of Excellence</td>
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<tr>
<td>2019</td>
<td>Bibliometric Assessment Tools Report</td>
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<tr>
<td>2020-2021</td>
<td>Strategic Plan 2020-2025 Research Areas of Excellence – Indicators</td>
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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