Building Support

Findings and Recommendations from Conversations with Civil and Environmental Engineering Researchers at Two Canadian Universities
Agenda

❖ Background
❖ Methodology
❖ Findings
❖ Conclusions
❖ Looking forward
Background

Davis Centre Library - University of Waterloo

Engineering & Computer Science Library - U of T
Supporting the Changing Research Practices of Civil and Environmental Engineering Scholars


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Executive Summary

Ithaka S+R’s Research Support Services Program investigates how the research support needs of scholars vary by discipline. In 2017 and 2018 Ithaka S+R examined the changing research methods and practices of civil and environmental engineering scholars in the United States with the goal of identifying services to better support them. The goal of this report is to provide actionable findings for the organizations, institutions, and professionals who support the research processes of civil and environmental engineering scholars.

Methodology Timeline

- Ethics & Amendment  
  *Sept - Nov 2017*

- Project Training  
  *Oct 2017*

- Invitation  
  *Oct 2017 - Mar 2018*
  - Department Meeting
  - Emails (mass and individual)
  - Holiday Cards

- Interviews Conducted  
  *Nov 2017 - Mar 2018*

- Interviews Transcribed & Anonymized  
  *Dec 2017 - Apr 2018*

- Interviews Coded  
  *Mar - Jul 2018*

- Report Writing  
  *June - Aug 2018*
Findings

Collaboration

Information Seeking

Knowledge Dissemination

Research Data Management

Open Access

Graduate Students
Collaboration

they can measure things that couldn’t be measured before...[and that] might lead to...an answer to a mystery that no one’s known for 50 years.
Information Seeking
I wasted years working on a subject that I thought no articles had been done and had done tons of searches and my students had done tons of searches but we didn’t know the word goniometer. If we had known the word goniometer, we would have known that somebody had done this.
Grad Students and RDM

Under the supervision of CEE faculty, graduate students were expected to “take the lead” on these tasks.
in practice we’ve lost the vast majority of data that students collect over the past. The stuff that’s in the thesis lasts forever, the stuff that’s electronic we don’t have a system for that, and that is a weakness.
Disseminating Research

Considerations:

- Fit
- Audience
- Who else publishes there
- Chief editors
- Impact factor
- Source Normalized Impact per Paper (SNIP)
- Journal reputation
- Time
- Acceptance rate
Disseminating Research

“...the sort of very cynical impact factor, is it going to help me get tenure?”
Knowledge Dissemination

“[...] a good project is one where we get a refereed journal article, a refereed conference publication, and something practical, a specification or some kind of application or something a practitioner can use.”
Open Access

it’s difficult to justify the money for that expenditure, because we do work for a project whether it’s an NSERC or whatever project, and we publish papers after the project ends, most of the time. [By] then we [have run] out of the funds. We don’t have funds to supplement that cost. So open access publication for authentic publishers is a financial challenge to me. That’s the only reason I don’t publish in open access.
Conclusions

For faculty, lack of time is a key issue affecting:

- Workload
- Grant writing
- Supervising students
- Publishing and disseminating research
- Data storage and sharing
Looking Forward...

- Data management and guidance on best practices
- Data storage solutions
- Professional development workshops for students
- Promoting and enhancing services, especially for graduate students
- Improving communication and outreach
- RDM, OA, research impact beyond traditional metrics
Thank You!

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