“YOU MUST RUN TWICE AS FAST AS THAT”

USING INSIGHTS FROM RESEARCHERS TO ALIGN LIBRARY SUPPORT TO RESEARCHERS’ NEEDS

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WHY STUDY RESEARCHERS?

- “Strategic alignment of resources to advance the capacity of our researchers and partners”
- Librarians and Staff hungry for answer to “what do researchers need?”
“... here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!”
WHY TWO USER STUDIES?

- **Ithaka S+R**: Supporting the Changing Research Practices of Civil and Environmental Engineering Scholars
  - One of 11 academic libraries to take part
  - What do researchers think libraries are for?
  - What services do they use now? What services will they use later?

Ithaka study team: Bertha Chang, Alex Carroll, and Colin Nickels
WHY TWO USER STUDIES?

- Libraries’ Fellows Initiative: Raising the Profile of the NC State University Libraries’ Research Support Strategies and Engagement
  - Librarians perspectives on research support and researchers’ need
  - Discover unmet needs and perceived unmet needs of researchers
  - Inform new services areas and creation of new outreach methods

Initiative study team: Colin Nickels and Hilary Davis
<table>
<thead>
<tr>
<th>Phase</th>
<th>Activities</th>
</tr>
</thead>
</table>
| Preparation           | ● Form team  
                        ● Develop interview questions  
                        ● Identify potential participants  
                        ● Submit IRB                      |
| Data Collection        | ● Invite participants and schedule interviews  
                        ● Conduct interviews  
                        ● Data capture: note taking; audio recording |
| Analysis               | ● Transcribe audio recordings (if needed)  
                        ● Organize interview notes  
                        ● Manually code transcriptions/interview notes  
                        ● Develop themes  
                        ● Re-code as necessary            |
<p>| Report/Recommendations | ● Write report and develop recommendations                                  |</p>
<table>
<thead>
<tr>
<th></th>
<th>Ithaka (Single Discipline)</th>
<th>Initiative (Multi-Disciplinary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research team size</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Disciplinary focus</td>
<td>Civil and environmental engineers</td>
<td>Cross-disciplinary</td>
</tr>
<tr>
<td>Data collection method</td>
<td>Semi-structured interviews</td>
<td>Semi-structured interviews</td>
</tr>
<tr>
<td>Participants’ status</td>
<td>Faculty</td>
<td>Undergrad/grad students, faculty</td>
</tr>
<tr>
<td>Number of participants</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>Interview length</td>
<td>30-70 min</td>
<td>50-65 min</td>
</tr>
<tr>
<td>Librarians per interview</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Analysis approach</td>
<td>Manually code interview transcripts</td>
<td>Manually code interview notes</td>
</tr>
<tr>
<td>Timeline</td>
<td>12 months</td>
<td>12 months</td>
</tr>
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</table>
FINDINGS

Selected Results from Both Studies
Successful collaborations have compatible research interests, clear expectations, well-defined roles and dedicated space (physical & virtual).

Challenges

- Technology
- Logistics
- "job is to hunt people down, schedule them, add in buffer time, facilitate communication so that everyone knows what is going on"
Interdisciplinary research is widespread

- Interdisciplinary approaches used to address research problems in core areas
- Funders increasingly favoring interdisciplinary collaborations

Challenges

- Finding literature in other fields
- Finding collaborators
- Finding publishing venues
“Fit” is more important than prestige
Perceptions of open access varied
Increase in non-traditional publishing

Challenges
- Incentive structure prefers traditional pubs
- Open access limitations
- Scaffolded publishing
Researchers have informal data practices and often felt that they could be “doing it better.” Practices vary greatly between labs and disciplines.

**Challenges**

- Storage and transfer
- Data analysis
- Data quality
- Finding data sets
OVERARCHING CHALLENGES BY CAREER STAGE

**Student**
“Make myself more confident and have a way to have older scholars have more faith.”

**Early and Mid Career**
"Having library spaces has been a lifesaver - being able to come in and hide from students."
  “Time, eat, sleep, doing things with my family.”

**Late Career**
“Ways to engineer projects to fit reality of people I work with - really have to know the limitations of the people I work with.”
OVERARCHING CHALLENGES ACROSS DISCIPLINES

Researchers’ Views of Discipline

Graduate Students

Information Silos
A RESEARCH TRACK

Library silos

Collections
- See OA resources & learn GitHub in Lynda.com

Workshops
- Learn to use digital scholarship tools

Programs
- Join our Open Incubator Program

Expertise
- Consult with scholarly comm expert

Spaces
- Collaborate in our Faculty Research Commons

Produce, distribute, and monitor uptake of non-traditional publications
Create and Share Non-Traditional Scholarship

Need help building a digital exhibit, timeline, or collection? Share or remix other open scholarship?

Selected Resources:
- Digital History
- Open Incubator Program

Upcoming Programs:
- A LaTeX Primer
- Citation management using Mendeley
- Introduction to Google Analytics
- Broading the Impacts of Your Research

Space to Collaborate:
- Reserve a Room

Lynda.com Video Courses

UPCOMING WORKSHOPS:
- JAN 31
  - A LaTeX Primer
    - 2:00 pm to 4:00 pm
- FEB 7
  - Citation management using Mendeley
    - 1:30 pm to 3:30 pm
- FEB 9
  - Introduction to Google Analytics
    - 11:00 am to 12:30 pm
- MAR 9
  - Broading the Impacts of Your Research
    - 1:30 pm to 2:30 pm
ANOTHER RESEARCH TRACK

Learn how to capture, edit, store, deliver videos for instruction and to showcase my research.

- **Collections**: Examples in JOVE subscription & Lynda.com
- **Workshops**: Take video capture + production workshops
- **Tech Lending**: Borrow an HD camcorder + tripod
- **Expertise**: Consult with a digital media expert
- **Spaces**: Edit + publish in Digital Media Lab Studio
ANOTHER RESEARCH TRACK

Create Videos for Instruction & Research

Need to communicate a difficult concept, reach a wider audience, or promote your findings?

Selected Resources:

Borrow Technology:

Book a Studio:

 Reserve a Room

Canon HD Camcorder
Canon Camcorder capable of shooting high-definition video and JPEG images. You also can ...  
Whtch Up, 1 Week

UPCOMING WORKSHOPS

Mar 26 Virtual Reality Studio Orientation
5:30pm to 6:30pm

Mar 31 3D Scanning Studio Orientation
4:30pm to 5:30pm

Apr 1 Virtual Reality Studio Orientation
6:00pm to 7:00pm

Apr 1 Make Videos at the Library
6:00pm to 7:00pm

View more Workshops →

lynda.com Video Courses
As a researcher, I need to understand where all of the grant support exists on campus (finding grants, writing proposals, biosketches, budgeting, compliance).

- **Expertise**: Use Faculty Central’s grant support and compliance experts, DMP Review service, Broader impacts guide.
- **Tools**: Use local tools to create and flesh out ORCID record, link to your biosketch template.
- **Spaces**: Reserve rooms in library to brainstorm on grant proposals with collaborators, or to find quiet time to write grant.
- **Programs**: Attend Faculty Writing Retreats (which include embedded librarians with skillsets related to grant-writing).
- **Collections**: Use library databases, subscriptions to conduct literature reviews for grant proposals.

**Library Silos**

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ONE MORE RESEARCH TRACK
ONE MORE RESEARCH TRACK

Locating Grant Support at NC State

Need help with grants including finding opportunities, writing proposals, biosketches, budgeting, & compliance?

Selected Resources:
- DATA MANAGEMENT
- GRANTS & FUNDING

Tools:
- NC STATE University Libraries
- Citation Index
- ORCiD

Meeting rooms:
- Reserve a Room

UPCOMING WORKSHOPS
- Nov 1: IFB Topical Workshop: DoD Affiliated Research Projects 10:00am to 11:30am
- Nov 1: Beginning R 10:30am to 12:00pm
- Nov 8: Research Data Practices for Graduate Students 11:30am to 1:00pm
- Nov 21: Build, Share, & Amplify Your Scholarly Profile Online 2:00pm to 3:30pm
<table>
<thead>
<tr>
<th>Research Tracks</th>
<th>ITHAKA S+R Studies</th>
<th>Campus Partnerships</th>
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</thead>
<tbody>
<tr>
<td>○ Making our website more aware of the kinds of resources it contains through linked data</td>
<td>○ Seeking to participate in additional ITHAKA studies “Big Data Research Practices” and “Teaching with Data in Social Sciences at the Undergraduate Level”</td>
<td>○ Partnering with CCEE on Graduate Student training</td>
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<tr>
<td>○ Using Drupal Taxonomies to tie content together</td>
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<td>○ Monitoring and attending campus efforts to foster interdisciplinary collaborations</td>
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<td>○ Fellows project</td>
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</table>
LESSONS LEARNED

○ Adjust questions to fit need
○ Two people for interviews
○ Allow for following up with researchers
○ Some questions better than others
○ Coding takes time
○ Code based on notes (when possible)
○ Model for continuous feedback loop
IMPLEMENTATION TAKES TIME & EFFORT

Implementing Findings

- Getting others involved
- Iterative process
- Stakeholders → partners and solution owners
- Tailor findings to specific audiences
READ ME

○ NCSU Libraries’ Ithaka Findings - http://www.lib.ncsu.edu/resolver/1840.20/35687

DOWN THE RABBIT HOLE

**Toolkit** - A set of questions and tips to continue these conversations with researchers

**Dataset** - Anonymized dataset from researcher interviews

**Preprint** - Findings and recommendations from the 2-year Fellows Initiative

**Presentations** - Conference presentations & internal discussion slides

AVAILABLE AT OSF.IO/AKD2V
THANKS!

Any questions?

https://go.ncsu.edu/chang_davis_nickels_2019charleston

You can find us at:
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Hilary Davis - hmdavis4@ncsu.edu
Colin Nickels - crnickel@ncsu.edu
Are you doing any interviewing?

Are you conducting any studies of researchers?

What surprised you in our findings?

What do you think would be different at your institution?
