Understanding Researcher Needs and Raising the Profile of Library Research Support

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Context of our Study

- Libraries’ Fellows Initiative: *Raising the Profile of the NC State University Libraries Research Support Strategies and Engagement*
- Researchers expect little to no learning curve
- Position our resources at point of need
- Pilot new outreach strategies
Strategic Alignment

- “Strategic alignment of resources to advance the capacity of our researchers and partners”
- Librarians and Staff hungry for answer to “what do researchers need?”
Internal and External Participants

- **Internal:**
  - Capture Scope of Research Support
  - Create Buy-In
  - Find Library Assumptions

- **External:**
  - Discover Unmet Needs
  - Investigate Outreach Methods
  - Test Library Assumptions
Methods

- Semi-structured qualitative interviews
- Data saturation with 12-20 interviews
- 22 researchers
- 24 groups of librarians
- But...each interview revealed new perspective
## Researcher Interviews - Demographics

<table>
<thead>
<tr>
<th>Career Stage</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>2</td>
</tr>
<tr>
<td>Early Career (1-5 years)</td>
<td>4</td>
</tr>
<tr>
<td>Mid Career (6-15 years)</td>
<td>9</td>
</tr>
<tr>
<td>Late Career (16+ years)</td>
<td>7</td>
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Findings
“What kinds of information do you rely on?”

- **Most popular:** Journal articles, books, government data, conference proc, colleagues
- **Data:** Twitter, remote sensors, GIS, industrial, census, imagery
- **Web:** Wayback Machine, blogs, Google Scholar, listservs
- **Technical:** Code, open source software, software & equipment manuals, GitHub
- **Library:** Dissertations, A&I databases, lit reviews, ref works, spec coll, digital newspapers
- **Other:** Citizen groups, courses, text corpora, news, grants
“How do you locate this information?”

- Google Scholar!
- **Student researchers** - Web-based strategies
- **Early and Mid-Career researchers**
  - Physical visit to the library
  - Personal networks
  - Twitter
  - Serendipitous discovery
- **Late Career researchers**
  - Journal alerts
  - Librarians
  - Twitter
  - Personal networks
“How do you look for help from others on campus?”

- Peer networks
- **Student researchers:** mentors, workshops
- **Early, Mid- and Late career researchers:**
  - disciplinary communities, campus units, website
- **Library-specific help**
  - access to collections and resources
  - service points
  - consultations
  - course-integrated pedagogy and instruction
  - workshops
  - events
  - spaces
Challenges in Seeking Help

- **Challenges**
  - Communication gap
  - Finding experts and collaborators
  - Networking events

- **Recommendations**
  - Create a stronger network of support
  - Aggregate of campus-wide services
  - Involve researchers in event development
“What kinds of data do you produce or use?”

● **Findings**
  ○ Small → Large data
  ○ Images, numerical, transcripts, physical data
  ○ Generated locally and using external data

● **Challenges**
  ○ Storage!
  ○ Data analysis
  ○ Data quality

● **Recommendations**
  ○ Outreach for storage options
  ○ Support for using new tools, methods
  ○ Data consultancy
“What kinds of skills do you need?”

- **Specific Skills**
  - R, Python, AI, IoT, GIS, Crimson Hexagon
  - All stages of career

- **Skills for Students**
  - Context of field
  - How to read an article
  - Editing
  - Communication
  - Core research
“What kinds of skills do you need?”

- **Soft Skills**
  - Interpersonal skills
  - Management skills
  - Reproducibility
  - Leadership

- **Technology Changing**
  - New skills every year
  - Project dictates skill to acquire
“How do you collaborate?”

● Findings
  ○ On and Off Campus
  ○ Complementary skill sets
  ○ Easier to get funding if collaborating
  ○ 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"
“How do you typically share or publish your work?”

**Challenges**
- Incentive structure → Traditional pubs
- Disciplinary reputation → Non-traditional pubs
- Open access limitations
- Scaffolded publishing

**Recommendations**
- Examples & support for scaffolded publishing
- Infrastructure for non-trad pubs + metrics
- Pathways to open access
- Build confidence in open research practices
Overarching Challenges

- **Time**
  
  "People want to do stuff with you, but many opportunities are missed because of lack of time"

- **Promotion and Credit**
  
  “I have a 50% contribution to one article.”

- **Aggregation and Relevance**
  
  “Some kind of an information and communication gap… some information is not written anywhere and some information is spread across many different places.”
Overarching Challenges

- “Make myself more confident and have a way to have older scholars have more faith” (Student Researcher)
- "Having library spaces has been a lifesaver - being able to come in and hide from students" (Early Career)
- "Time, eat, sleep, doing things with my family" (Mid 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" (Late Career)
Librarians vs. Researchers on Services

- **Researcher Support and Services**
  - Collections
  - Consultations
  - Search Strategies
  - Scholarly Communication Support
  - Data Management Plans
  - Data Visualization Support
  - Technology Lending

  All of the above
Librarians vs. Researchers on Services Outreach

- **Targets for More Outreach**
  - Intellectual Property: No
  - Tech lending: Yes
  - High-Tech Spaces: Mixed
  - Digital Media: Yes
  - Data and Visualization: Yes
Librarians vs. Researchers on Outreach Methods

- Outreach Strategies
  - Email
  - External Dept Meetings & Events
  - Building & Sustaining Relationships
  - Workshops
  - Library Programs
  - Course-Based Instruction

  All of the above
Next Steps

- Interview Guide for Liaisons
- Research tracks - test and iterate
- Sharing with Stakeholders
- Continuing to Improve Discovery
  - Partnership between User Experience and Acquisitions and Discovery
  - Linked-Data Approach
Questions & Thanks!

Slides: go.ncsu.edu/ncserials-researcher-needs

OSF.io: https://osf.io/akd2v/

Medium: medium.com/raising-the-profile

Follow-up with us anytime:

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