Before and After: Planning and Assessment of New Library Spaces and Services

Southeastern Library Assessment Conference
October 22, 2013

Bertha P. Chang
Honora N. Eskridge
North Carolina State University Libraries
Introduction and Context

James B. Hunt Jr. Library
Open for business: January 2, 2013
Introduction and Context

• Construction of new library facility on developing campus
• Main constituents –
  • Textiles: branch library, 1100 users
  • Engineering: no dedicated branch library, 8000 non-traditional users
• Before: one main library (D. H. Hill) on historic campus, 4 small branches
• After: two main libraries (D. H. Hill & Hunt), 3 small branches
• Providing spaces we have never supported before (in terms of technology and quantity)
• No appreciable growth in staff
Our History With User Research

• No assessment librarian, no systematic approach to research.
• Usability studies (approx. 10 years)
• Web redesign in 2010, heavy user-research component.
• Beginning with Hunt Library design and planning, more research focused on spaces and services. Still very ad hoc/reactive, led by subject librarians.
User Research 2011-2013

• “Before” studies:
  • Observational
  • Interviews
  • Short, in person survey
  • Long, online survey

• “After” studies:
  • Observational
  • Interviews
  • Long, online survey
Interviews

• For faculty and grad students
• To inform design of the faculty commons and grad commons spaces
• February 2011: 71 interviews (40 fac/31 grad)
• March 2012: 8 interviews (all grad)
• May 2013: 11 interviews (all fac)
Interview Research Questions

• About their research
• About their work lives
• About their work spaces
• About their technology needs
• About their furniture needs
• How they anticipate using Hunt and what would entice them
Interview Methodology

- Script of 22 questions, some additions mid-way
- Approximately 1 hour in length
- Conducted in person (their office or work space)
- Faculty: 1 at a time, Grad: sometimes in groups
- 1 interviewer, 1 note-taker, digital recorder
- Trained subject librarians
- Transcribed recordings
Lessons Learned from the Methodology

• Professional transcription is worthwhile.
• Easing people into the process may be necessary.
• Insist that interviewers read every question.
• Pairing up is a good thing.
Interview Analysis

- Carried out by one librarian
- Transcripts examined for data related to the research questions
- Data grouped by category, quantified, and examined for trends
Interview Results

- Graduate Students
  - Need for varying types of spaces
  - Need to support varying technologies
  - Different needs of different user groups
    - Non-thesis master’s students
    - TAs
    - PhD students
  - Learned about the types of spaces departments provide for grad students
Interview Results

• Faculty
  • Needs not as explicit as with grad students, broke out into:
    • Traditional (teaching support, and collections needs)
    • “A place to impress someone” – strategic partnerships
    • Hidden population – busy younger engineering faculty working towards tenure
Observational

• Students observed:
  • Undergraduate, graduate students

• Before
  • May 2011
  • To inform design of study spaces in Hunt
  • Engineering Buildings public spaces, Textiles Library (1 study)

• After
  • Spring 2013, Fall 2013
  • To assess students’ actual use of spaces
  • Hunt Library Graduate Student Commons (2 studies)
Observational Research Questions

- When are students using the space?
- How are students using the space?
- What types of furniture are students using?
- What types of technology are students using?
- Are the students working alone or with others?
- What size groups?
- Are there any unmet needs?
Observational: May 2011

Finals week

- Photo/observation + brief interviews (8 days)
- Public spaces within Engineering Buildings I, II, and III
- Textiles Library
Observational: Hunt Grad Commons

- **April 2013**
  - 1 week formal observation
  - 8am – 8pm (3 hour intervals)

- **Fall 2013 (on-going)**
  - Every Monday
Observational Methodology

• Design process:
  • Learned from others (e.g., colleagues, literature search)
  • Pre-tested if possible
  • Otherwise: “Just do it!”

• Implementation:
  • Schedule dictated by academic calendar, library events and activities, staff availability
  • Data recorded on paperprinted templates
  • Pre-observation team meeting to review protocols
  • Paired up team members on first observation to establish baseline and ensure consistency
Observational: Analysis

- Microsoft Excel
- Data analyzed for trends related to research questions
Observational Results: Groups

May 2011 (EBs & Textiles Library)

(n=1,222)

55% groups
45% solo

April 2013 Hunt Grad Commons

(n=890)

53% solo
47% groups

May 2011 observation - group sizes

Grad Commons study rooms - group sizes

83.5%
83.0%
Observational Results: Group Rooms

Group Study Rooms - # of occupants

- Two: 69
- One: 45
- Three: 33
- Four: 14
- Five: 4
- Six: 2
- Seven: 1

Frequency (including n=1)

- One: 27%
- Two: 41%
- Three: 20%
- Four: 8%
- Other: 4%
- Five: 2%
- Six: 1%
- Seven: 1%
Observational Results

- Need for quiet, individual study space
  - 26.8% of group study room uses were by individuals
  - 25.5% of workstation occupants were not using workstations
Observational: Lessons Learned

• Ideal case: plan, pretest, refine, repeat as needed
• If quick turn-around required: just do it
• Seek feedback from interested parties to ensure important data is being captured
• Recognize the limitations of observation
  • Can only infer so much from the data
• Follow-up interviews can help clarify observational data
  1. How do you like this space?
  2. Do you have everything you need?
  3. Is there anything else you want?
Surveys

- Students surveyed
  - Engineering students
  - Engineering and Textiles graduate students

- To examine students’ group study habits and use of library spaces and technology
Surveys

• **Before**
  - September 2011: short, in-person 1 minute survey,
    - Engineering and Textiles students
    - Follow-up to May 2011 photo observation
  - Fall 2012: Extended online survey
    - On-campus graduate students in Colleges of Engineering and Textiles
    - Follow-up to graduate student interviews
    - “Pre-Hunt” snapshot

• **After**
  - Fall 2013: Extended online survey
    - On-campus graduate students in Colleges of Engineering and Textiles
    - “Post-Hunt opening” comparison
Survey Research Questions

• How and to what extent are students using physical spaces in the Libraries?
• Which library services are being used?
• Pre-Hunt: Do they anticipate using Hunt Library?
• Are students using the Libraries for individual or group work?
• What types of technologies are students using?
Survey Methodology (Short Survey)

• Design
  • 8 questions drafted in 1 hour by 2 team members
    • Focused on group work and laptop use
    • Tested on one student and tweaked

• Implementation
  • Launched 2 days later
  • Survey available in paper and iPad versions
  • 3 days in 3 different engineering buildings,
    • Surveyed 50 students at each location during midday
    • Additional students surveyed at Textiles Library
Survey Methodology (Online Surveys)

- **Design**
  - Questions drafted and reviewed with team members
    - Fall 2012: 96 questions
    - Fall 2013: 78 questions
  - Consulted with NCSU University Planning and Analysis (UPA) office
  - Pilot-tested with graduate student library workers

- **Implementation**
  - Used Qualtrics (online survey software)
  - Survey active for two weeks
  - UPA office provided contact information for survey population
  - Incentives offered for survey completion (Amazon Kindles)
Survey Analysis

• Microsoft Excel
• Qualtrics analysis tools
Survey Response

September 2011 short in-person
- 177 responses in ~177 minutes
- Demographics of survey respondents similar to survey population
  - Departments
  - Undergraduate/graduate
    - Note: 77% undergraduates

Fall 2012 graduate online survey
- 781 responses (31% response rate)
- Demographics of survey respondents similar to survey population
  - Degree programs
  - Departments
  - International students
Survey Results: September 2011

Frequency of group study:
- Every day: 4%
- Several times/week: 13%
- Several times/month: 26%
- Several times/semester: 41%
- Never: 16%

Group study: frequency & group size:
- 2-4: 140
- 1-2: 120
- 4-6: 100
- 6-8: 80
- 8-10: 60
- 10+: 40
Survey Results: Fall 2012

Q: Have you ever used any physical spaces in the NCSU Libraries this semester?

- Yes: 77%
- No: 23%

n=714

Q: For which activities have you used library spaces?

- Both solo and group work: 49.5%
- Solo work only: 43.8%
- Group work only: 6.7%

n=511
Survey Results: Library Spaces (Fall 2012)

% use by degree program

- MS (non-thesis) (n=255): 86.3%
- MS (thesis) (n=133): 85.7%
- PhD (n=323): 66.6%

% use by College and campus

- Textiles (n=50): 92.0%
- COE (Centennial) (n=506): 73.7%
- COE (Main Campus) (n=148): 85.8%
Survey Results: Library Spaces (Fall 2012)

• What keeps them away?
  • Location of libraries
    • Inconvenience due to distance, parking, and/or transportation factors
  • Space
    • Alternative work spaces (e.g., offices)
    • Personal preferences
  • Collections
    • Use of online resources
Survey Results: Use of Hunt (Fall 2012)

- 77% of respondents anticipated using Hunt Library
- Includes 59% of Fall 2012 non-library users
Surveys: Lessons Learned

- Paper works better for in-person surveys: can process multiple respondents at the same time
- Take advantage of campus-provided tools and resources, if available (e.g., Qualtrics, survey support)
- Check if clearance is needed from appropriate campus organization(s)
- Resist “mission creep”
- Minimize use of complex questions
- Use text questions/answers to help clarify data
Final Thoughts…

• Design
  • Factor in time for IRB approval
  • IRB application form provides a vehicle for thinking through various steps of study

• Analysis
  • Factor in the time needed for post-study analysis

• Other
  • You get better as you learn
  • Recognize the limits of study types
  • The value of triangulation
  • New role for the subject specialist
  • Just do it!
Acknowledgements

• Greg Tourino
• David Zwicky
• Ruth Gagliardi
• Stefanie Peterson

• Karen Ciccone
• Hilary Davis
• Kim Duckett
• Dana Gierdowski
• Margaret Peak
• Orion Pozo
• Mohan Ramaswamy
• Nancy Whelchel (UPA)
• Josh Wilson