Observing Student Researchers In Their Native Habitat

ER&L
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Agenda

- Objective – Why do a study?
- Methodology – How the study was conducted
- Findings – What we learned
- Recommendations – What your library can do
Objective – Why Do a Study?

• Learn how relevant library resources are in students’ study habits
• Learn where library resources fit in students’ research process
• Learn how students access and select resources
Methodology – How the study was conducted

- A contextual inquiry
  - A simple, inexpensive method
  - Real students observed doing real research for actual course assignments in their native environments
- Onsite & remote
Where did we go?

Apartments
Who did we observe?

- Undergraduates
- Graduate students
- Variety of disciplines
- Mix of novice and sophisticated researchers
How did we find students?

• Round 1
How did we find students?

- Round 2
Screening

• Zoomerang survey

Student Questionnaire

We are conducting a study of research habits of college and university students for a company that develops research solutions. The name of the company is not being revealed in order to ensure the study results are not biased. The company is listed on the New York Stock Exchange and was recently named one of the nation’s 200 best small companies by Forbes Magazine. The name of the company will be revealed at the end of each participant’s session.

We are looking for students that are willing to be observed online while doing research for an academic assignment. The purpose of the study is to assist with the development of new research solutions.

Participants will receive a $50 Visa gift card for a 90-minute session.

The study will be conducted over the internet. Participants are required to have access to the internet and a telephone.

If you are interested, please fill out the questions below. If you are selected for the study, you will receive a confirmation within the next few days which also confirms the date and time for your participation.

1. Which college or university are you enrolled in?

2. What degree are you pursuing (and what year are you in)?
   - Bachelor’s (Freshman)
   - Bachelor’s (Sophomore)
Screening

- Gmail account for anonymity
Capturing the sessions

[Description of the screenshot showing a session in progress with various web pages and tools open, including MSN.com, CNN.com, and a search protocol for observation.]
The student view
On-site observation

- On-site observation = more complicated
  - Laptop
  - UserVue – to capture
  - Skype & Microphone – to record audio
  - Broadband wireless card – for Internet access
Remote observations

- Remote = simpler
  - Computer with Internet connection
  - Phone
  - UserVue
Observing remote sessions
It’s simple

- Find users
- Watch them
- Learn

- *Recording is nice, but optional*
Findings – What we learned

• How users decide which resources to use for their research
• How students use library resources
• How students are really using Google
• How social networking sites factor into student research
Student behavioral characteristics

• Experts at multi-tasking
  – Multiple research tasks/subtasks simultaneously
  – Simultaneous social interactions

• Not distractible (ambient noise/activities, advertising, pop-up, etc.)

• Various ways for capturing research (bib tool, notepad, Word, saving PDFs, etc.)
How they choose where to start their research

• Library outreach
• Course instructor
• Brand awareness
• And Google
How students use library resources

- Brand loyalty (irrespective of focus)
- Lack of distinction between databases
- Contextual linking
- Knowledge of ejournals and associated authentication issues
How students really use Google

• Primary research tool
• Supplement research
• Handy for look-ups
Google as a primary research tool

- Sufficing, when quality isn’t a concern
- Insufficiently aware of library e-resources
- Bad experiences with library e-resources
Bad experiences with library e-resources

• Search catalog for articles
• Difficulty navigating e-resources web page
• Difficulty discerning what databases to use for their particular research need
• Authentication issues
Google to supplement research

• Just check to see if anything else comes up
Google as a handy look-up tool

- Locate known resources
  - Known sites (NGOs, museums, etc.)
  - Major newspapers
  - Library resources

- Get specific answers
  - General information about a topic
  - Definition of a term, e.g. p16 protein
  - Complete a citation for an article of interest
How social networking sites factor into student research

• For the most part, they don’t
• One student mentioned using it for a group project as a means for communication within the group
Recommendations – What your library can do

• Increase the relevance of the library in students’ research tasks by…
  1. Refocusing information literacy efforts
  2. Making resources discoverable
  3. Increasing awareness of databases
1. Refocus information literacy efforts

- Focus on library marketing rather than instruction
- Reach students in the context of coursework
  - In person in the classroom
  - Via instructor
  - Via course pages
2. Make resources discoverable

• Simplify e-resources web page design
• Address students perception that “the online catalog represents all library resources”
• Optimize for campus search engine
  – Students prefer to search over navigating extensive lists and categories
  – Leverages existing student brand awareness
3. Increase awareness of databases

- Offer databases on library pages by course and degree
- Library promotion of specific databases to students and faculty of specific disciplines, i.e. target marketing
- Include appropriate databases in course materials, especially on the course site
Conclusions

• Many resources and applications are used in concert to satisfy student research habits

• Awareness of resources significantly impacts effectiveness of student research efforts

• Comprehensive and accurate understanding of information resources is generally lacking

• Presentation of library resources is in critical need of improvement
“To be successful in today’s world, those who define and build [research solutions] must know how to fit them into the fabric of everyday life.”

Beyer & Holtzblatt

Thank you

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