

The ERIAL Project at UIC

Understanding How Students Search for Information

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Interviewer: When you think of JSTOR, do you think of it as a resource the library has, or do you think of it as something separate?

Student: Oh no, I think of it as something like totally separate. I just think that it's something that the UIC Library trusts to help students...

The UIC Parameters

Targeted students who...

- were first generation college students.
- were new to the library, mostly freshman and sophomores.
- had worked on a research project (in high school or at UIC).
- were from a broad sample across disciplines.
 - a smattering from business, communications, sciences
 - most from first year English composition

Where do students start gathering information?

- Google (and other non-library websites and search engines)
- Peers, friends and family
- Library they used in high school/local library
- Professors/TAs

On Starting with Google

“I mean, it’s like everything you can find and you don’t have to think about ‘what do I want?’ just what you think you want, and then just write that.”

“[W]hatever I’m thinking, I want to put it in my paper, I type it in Google Books, and I find a book for it, and usually the book is even talking about what I’m talking about. Sometimes I’ll look up the book in this [UIC] library, and I’ll find it here. I can just – you know Google shows you some pages in the book? I can cite it from Google.”

On Starting with Course Readings

Int.: You've got 8 sources...tell me how you found the first one.

Student: That was a reading we did in class.

Int.: That was one of the readings they assigned you in class? Okay and the second one?

Student: That was also another reading from class.

Int.: Okay the third?

Student: I got that from the first reading that we did in class.

Int.: You got it from the first?

Student: From the first, yeah.

Int.: And the fourth article here?

Student: We also did that one in class.

Int.: Okay and the fifth?

Student: We did that one in class.

Other Ways of Getting Started

“First you have to find some sources, some stuff to look at and then you validate them. Then you make sure if you can actually fit your argument into what you are writing. And then you also have another person to look at it to see if that will help you or if you’re just wanting to find something to back you up...When I say validate, especially on internet you can write anything on the internet and you have to make sure that that stuff is true, so then you pick up another book, to see if that’s actually true or not or you just know. You can find other sources and see if they all say the same thing.”

“I’ve got like 4 tabs on the webpage, I’m bouncing back from different things... I’ve got one tab, you know, for research, and then the other tab is for the Wikipedia page, and like a notebook in front of me, and I would just copy down, write it...”

“The research that I had wasn’t much at the time, and then I found this out as I was writing it – needing to go in, put fillers in, trying to expand on some of the ideas that I had, stuff like that – so I actually did the research all throughout the project, up until I turned it in.”

What kinds of help do they seek?

- Direction toward where to search for journal articles and books
- Instruction on how to use databases and indices
- Instruction on how to access article or book once found in catalog/database/index
 - In physical library
 - Electronically
- Structuring and writing the paper
- Citing sources/formatting bibliography
- Selecting/revising topic
- Proofreading

Who do they ask for help?

More or less in this order of preference

1) Their close network:

a) Professors/TAs

b) Peers and family

c) Public librarians

2) Upon being referred:

a) UIC librarians

b) Writing Center

What help do students seek from whom?

- Professors/TAs- everything
- Writing Center
 - Organizing paper
 - Formatting and citations
 - Proofreading
- Librarians
 - Getting around the physical library
 - Using databases and indices
 - Formatting and citations
 - Technology
 - One student said he didn't know he could ask librarians for help.

On Getting Help from Students' Close Network

“I would ask my professor constantly if I was going in the right direction. I would send him emails, and I had this bad habit of copying and pasting after every paragraph and sending it to him and just asking him to proofread it.”

Int.: Did you ask questions of your professor?

Student: Yeah, a few times, you know, when I was kind of struggling for material to find what I could do with this project, I would ask her...

Int.: ...[I]s there any particular reason why you asked your parents?

Student: They were available, I think they're insanely intelligent, so [laughs] I always like asking them things that I have questions about.

“I was talking to my friends and just ‘oh by the way, I have this thing that I’m doing.’”

On Getting Help from Students' Close Network, cont.

Student: I used 3 – it would have been the Crete Public Library, Park Forest Public Library, and Chicago Heights Public Library.

Int: Thanks – any reason why you used 3 of them?

Student: They were the ones that I'm most familiar with – they were the closest, you know, driving-wise, so.

Student: I went to my friends, I went to the librarian, everybody.

Int.: And what were you hoping to receive in the way of help?

Student: I wanted you to tell me – I wanted them to basically help me write the paper [laughs] like tell me how.

On Getting Help from Academic Librarians

“I walked past a couple of times – I was very stubborn about this situation, I was like ‘I can do this’, but on finding that I couldn’t find the correct books that I needed, I was looking in the wrong place, I finally approached them and said – you know – ‘I’m having trouble with this, would you mind helping me?’ and they’re like ‘okay, well, we’ll see what we can do for you.’”

“No – I’m scared of librarians.”

How do they know when they have what they need?
(i.e. enough sources, the right kinds of sources)

- Usually via professors' parameters
 - Specific number required
 - Occasionally to fulfill page limit
- Occasionally by what the topic required
- By evaluating authority (of source and of information)
- By evaluating difficulty

What types of sources do they reject?

- Those that do not exactly fit their argument
- The least authoritative (some)
- The least informative (some)
- Those that were too difficult (some)

On Selecting Sources

“After I had, you know, achieved all that information, I was like ‘oh okay, this is the amount of sources that I need, I don’t need to look up anything else.’ So that was basically it.”

“I knew when I had enough sources when I was confident about my thesis statement, and I felt like I could actually write five to six pages on it.”

“The only thing is that I don’t really know how to tell which article is legitimate – that’s the other thing – I can tell when a book is legitimate, but an article, newspapers – newspapers maybe I can trust – but articles, I don’t know.”

“We were told we couldn’t use .com and even .org, we had to be careful of, but .gov was really good, because it’s political science, and yeah, I thought that basically he really didn’t want any internet, but if we felt that we had to, it had to be very legitimate.”

On Selecting Sources, cont.

“... I just took all the sources, and picked the best ones that fit my information that I needed.”

(On using the local library) “Okay these are the sources that I want to use, this is what’s available, this is what I can work with.”

“Sources I don’t understand I just left alone and found something else.”

Theories and Realizations

- Students get help from professors/TAs because they have a mandatory relationship.
 - Students do not have a built-in relationship with librarians.
 - Students do not know what librarians can do for them.
- Beginning students do not seem to realize and/or value the difference between academic and public libraries.
- Students do not seem to connect online library resources with the library.
- Students are not thinking a lot about their search terms.
- Students don't know that the abstract/citation is not the article, so think they have found it.
- Students do not know what to do next when they do realize they have found just the citation.
- Students don't recognize the research part of writing as a set of skills.

Implications

For service

- Orientation
 - Make it mandatory.
 - Clarify difference in types of libraries.
- Instruction
 - Clarify difference in types of libraries.
 - Emphasize the need to find synonyms and revise search terms over the course of the research process.
 - Become a part of the course.
 - Professor introduces librarian at the beginning of the semester...

Implications, cont.

For service: Instruction, cont.

- Visit the class multiple times.
- Go to the classroom as well as have students come to the library.

For research

- Explore which libraries college seniors use.
- Explore “zone of intervention.”
 - Ways of identifying
 - Ways of being accessible to students at that point
- Explore what digital natives mean by “technology.”
- Explore student awareness that online library resources come from the library.

Suggested Reading

1. Connaway, Lynn Silipigni, and Timothy J. Dickey. The Digital Information Seeker: Report of Findings from Selected OCLC, RIN and JISC User Behaviour Projects. Joint Information Systems Committee (JISC), 2010.
2. Foster, Nancy Fried, and Susan Gibbons, eds. Studying Students: The Undergraduate Research Project at the University of Rochester. Association of College & Research Libraries, 2007.
3. Head, Alison J., and Michael B. Eisenberg. Lessons Learned: How College Students Seek Information in the Digital Age. The Information School, University of Washington, 2009.
4. Housewright, Ross, and Roger Schonfeld. Ithaka's 2006 Studies of Key Stakeholders in the Digital Transformation in Higher Education. ITHAKA, 2008.
5. Kuhlthau, Carol C. "The Concept of a Zone of Intervention for Identifying the Role of Intermediaries in the Information Search Process." Proceedings of the 59th Annual Meeting of the American Society for Information Science (1996): 91-4..
6. Kuhlthau, Carol C. "Inside the Search Process: Information Seeking from the User's Perspective." Journal of the American Society for Information Science 42.5 (1991): 361-71.

A list of suggested readings is available here: <http://bit.ly/pickard-brantley-carli>

Our slides are available here: <http://bit.ly/pickard-brantley-slides>

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