

Inside Knowledge: Using Assessment Data to Support Change

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Empirical data

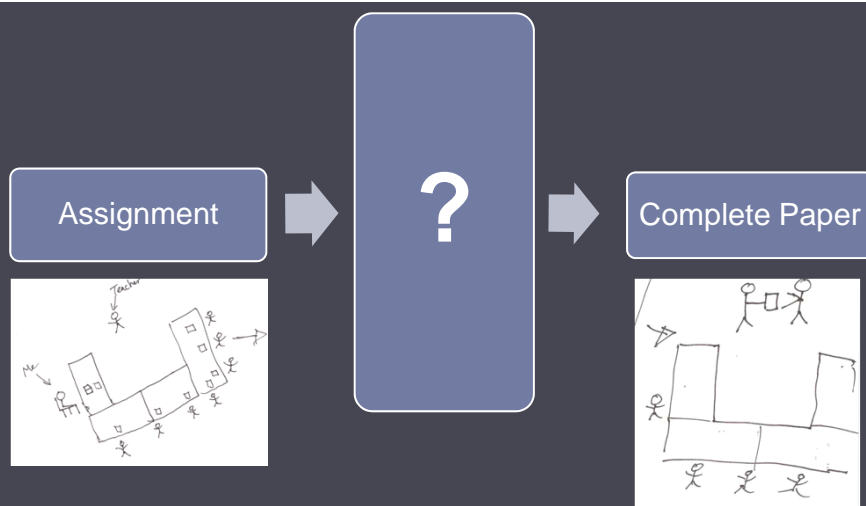
Real people in real situations

Ethnographic Research in Illinois Academic Libraries



www.erialproject.org

How do students find and use information for their academic assignments?



The ERIAL Project

- 9 Data Collection Methods
- 719 Research Contacts (over 600 unique participants)

ERIAL Methods

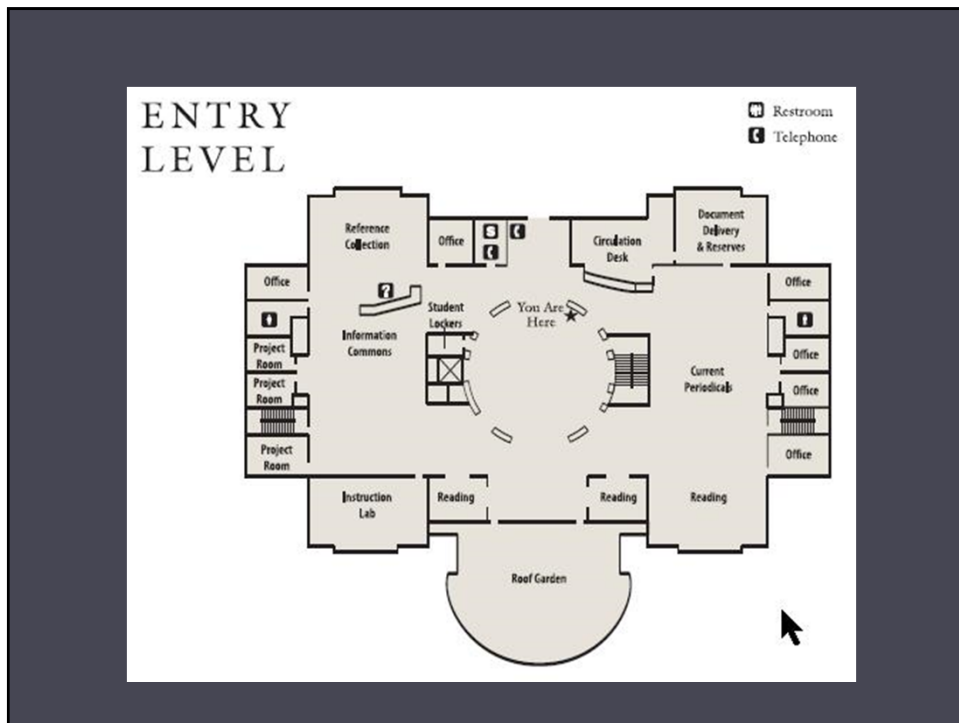
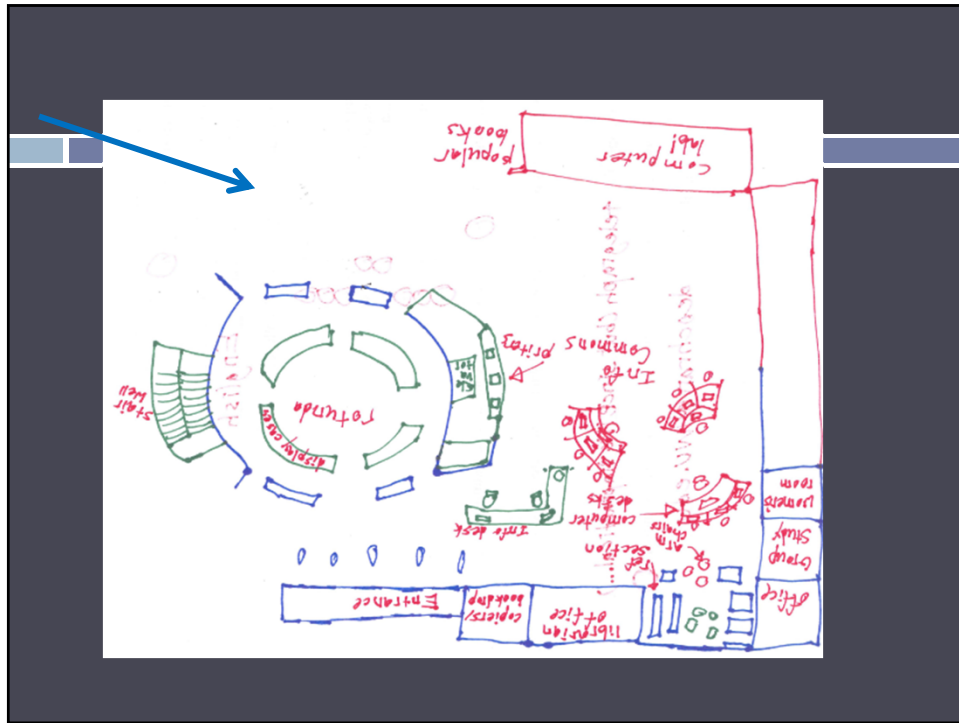
- Interviewing Methods
- Observational Methods
- Visual Methods
 - ▣ Photography
 - ▣ Design Workshops
 - ▣ Storyboards
- Mapping Methods
 - ▣ Time-use
 - ▣ Library Maps

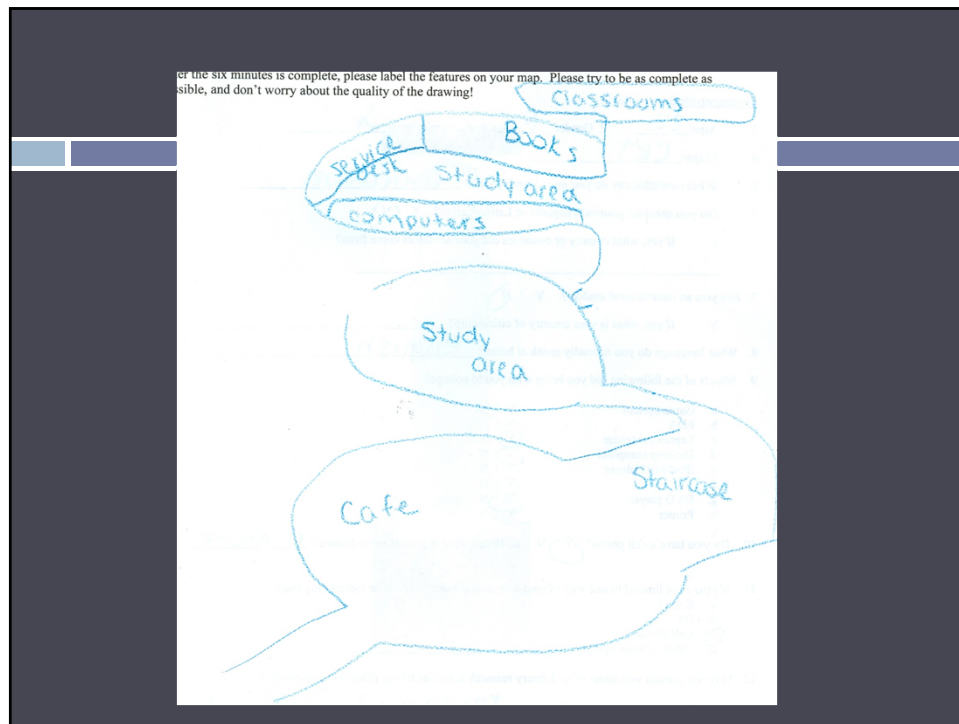
The ERIAL Project

- 280 Semi-structured Ethnographic Interviews
 - ▣ 49 Librarians
 - ▣ 75 Faculty Members
 - ▣ 156 Students
- 60 Research Process Interviews

Retrospective Research Interviews







High Identification:

- ☐ Reference/Circulation Desks
- ☐ Computers
- ☐ Study Areas/Labs
- ☐ Information Commons

Low Identification:

- ☐ Librarian Offices
- ☐ Journals
- ☐ New Books

Much high-traffic library real estate was used for low-identification elements

Research Process Interviews

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- Detail of students' actual practices.
- Effects of information literacy problems.
- Revealed issues hidden by quantitative data.

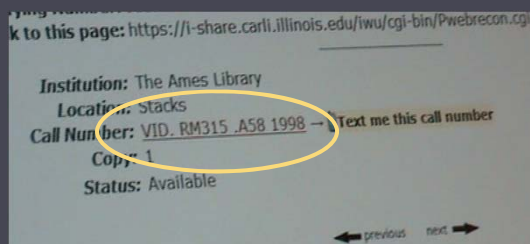
Research Process Interviews

Example:

- First-year IWU student attempting to locate a video to use as a source for a research assignment.
- Confused about where to look for materials in the catalog, as well as LC call numbers.
- Student has already had two library instruction sessions.

Step 1: Identifies Item in Catalog

- Misinterprets call Number as “Video Room 315.”
- “RM” shelving is located on the fourth floor.
- Not sure about where to go, the student goes to the reference desk for help.



Step 2: At the Reference Desk

- The student staffing the reference desk is not there, leaving no one to help.
- The student consults a bookmark giving call number locations, decides that the item is on the fourth floor based on where “V” call numbers are shelved.

“I’m guessing--it starts with VID so that’s on the fourth floor.”



Step 3: Try the Circ Desk



- Decides to ask at the circulation desk.
- Is given incorrect information: *"Videos are on the third floor."*
- Videos are shelved in the stacks by call number.

Step 4: Ask at the Media Center



- The student goes to the third floor, but is confused because she can't find "Room 315."
- Asks for help at the media center, but the student tells her that she should ask at circulation.

"The circulation desk downstairs deals with where things are. We're mainly to check out equipment. . . things like laptops. I'm sorry."

Step 5: Read the Floor Plan

- The student consults the third floor signage, but can't find the call number on the map because it shows only one floor.

"This is not helping me. . ."



Step 6: Return to the Circ Desk

- The student returns to circulation desk, and is finally given correct information
- Finds video in the stacks
- Total time to find item:
10 minutes
- Very few students will persist this long



Service Implications

- VID Removed from call numbers
- Additional directional signage.
- Maps and/or locations displayed in catalog page alongside call number.
- Common basic service requirements and training at all service points.
- Increased training for library student employees

Power of the users' experience

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- Empirical examples are persuasive
- Difficult to ignore data about “our” students
- Invigorated the relationship with teaching faculty
- Administrators want this type of information

Power of the users' experience

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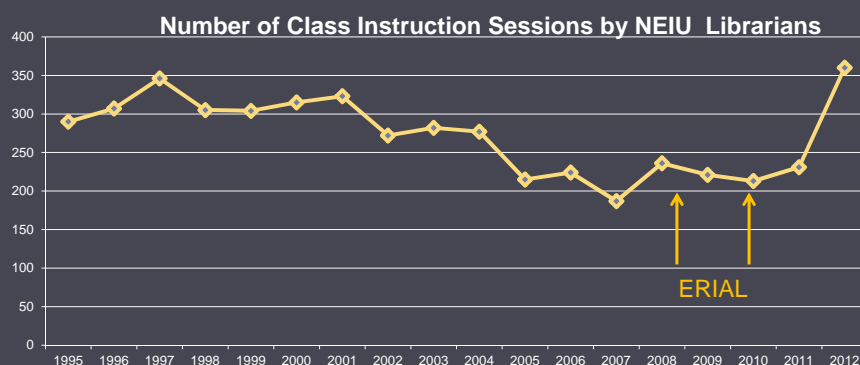
- Impact on the teaching faculty
 - "...Moreover, our findings dramatically changed the conversation with teaching faculty and administrators on why, and how, to incorporate information literacy into the curriculum."

Lynda Duke, Academic Outreach Librarian,
Illinois Wesleyan University

Power of the users' experience

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- Impact on the teaching faculty



Research consultations tripled

Discovery Tools Implementation



How do students use these tools?



- 86 students participating
 - 41 IWU
 - 46 Bucknell
- Qualitative and quantitative measures of search practices

Methods

- 5 Test Groups
 - Summon
 - EDS
 - Google Scholar
 - "Conventional" Library Catalog
 - No tool
- 4 Research Tasks
 - Find 2 sources per task
 - Evaluated using a 0-3 scoring rubric by instructional librarians
- Debriefing Interview
 - Open-ended questions on search practices and evaluation processes

Results

Mean Scores					
	EBSCO Discovery	Summon	Google Scholar	Library Catalog/Datab ases	No Tool
All Questions	2.54	1.92	1.80	2.06	2.05
Question 1	2.46	2.29	1.19	2.13	1.96
Question 2	2.20	1.15	1.49	1.94	1.73
Question 3	2.83	2.01	2.33	2.05	2.15
Question	2.70	2.19	2.09	2.02	2.33

Google structures expectations

- ☐ Single search box
- ☐ Simple keyword search

(Almost) Every search is a Google search:

Type of Search			
	Simple	Advanced	Boolean
Google Scholar	94.5%	4.2%	1.4%
Summon	79.3%	12.6%	8.1%
EDS	75.4%	23.1%	1.5%
Library Catalog/Databases	77.2%	19.1%	3.7%
No Tool	81.1%	16.3%	2.5%
Total, All Groups	81.5%	15.1%	3.4%

Overall, simple search was used 82% of the time.

Source: Discovery Tool Research Results, Illinois Wesleyan University/Bucknell University, 2011

92% of the resources utilized were found on the first page of search results.

First-page Sources	
	Percent of sources found on first page
Google Scholar	83%
Summon	96%
EDS	94%
Library Catalog/Databases	94%
No Tool Specified	94%

Source: Discovery Tool Research Results, Illinois Wesleyan University/Bucknell University, 2011

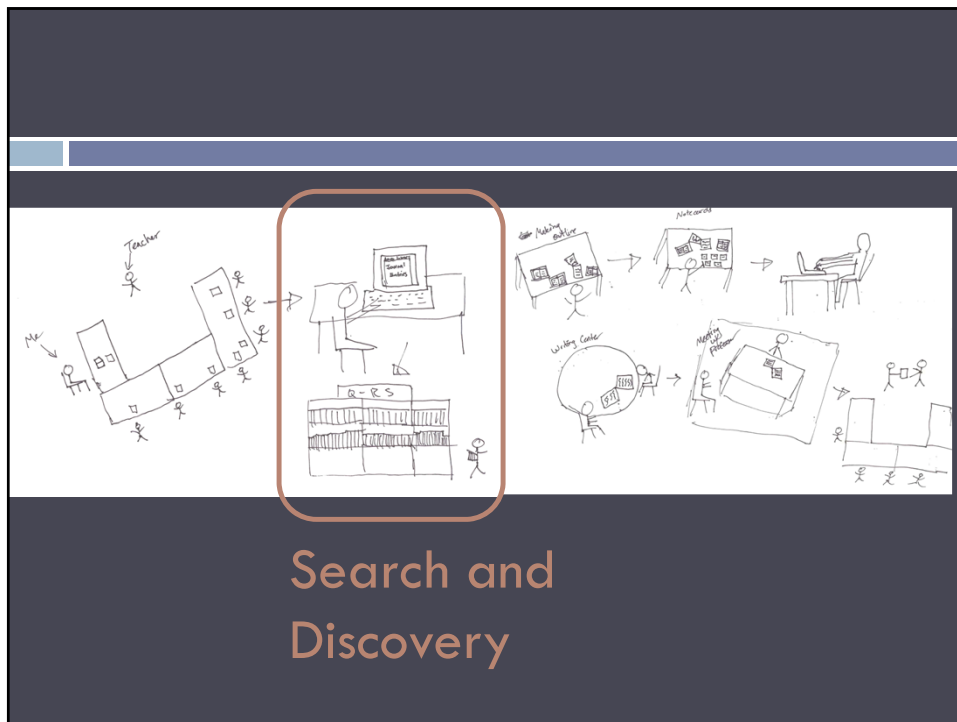
What a tool searches determines what students use:

Resource Types					
	Google Scholar	Summon	EDS	Library Catalog/Databases	No Tool
Academic Journal Articles	55.0%	65.0%	73.8%	49.2%	50.3%
Books	26.5%	13.4%	12.5%	41.3%	15.4%
Newspapers/Magazines/Trade Journals	2.0%	20.6%	6.3%	3.2%	2.7%
For-Pay Articles	13.3%	0.0%	0.0%	0.0%	1.3%
Websites (including Wikipedia)	0.7%	0.0%	0.0%	0.0%	21.5%
Government & Legal Document	2.7%	0.0%	5.0%	2.1%	2.0%
Other Documents	0.0%	1.0%	2.5%	4.2%	6.7%

Source: Discovery Tool Research Results, Illinois Wesleyan University/Bucknell University, 2011

Usage of selected newspaper databases at Bucknell, 2009-2011.

	2009 Click-throughs	2010 Click-throughs	Usage increase compared to 2009	2011 Click-throughs	Usage increase compared to 2009
ProQuest National Newspapers Premier	131	1,475	1026%	918	601%
Ethnic NewsWatch	60	562	837%	481	702%
ABI/INFORM Trade & Industry	28	220	686%	107	282%
America's Historical Newspapers, 1690-1922	15	101	573%	24	60%
LexisNexis Academic	1,280	6,977	445%	5,233	309%
Total, All Databases	49,886	90,854	82%	89,116	79%



Constructing a Search

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Simple Search → {
 “Too much information”
 “Not enough information”
 }

- Students change search rather than refine
 - ▣ “Magic” Search Terms
 - ▣ Poorer quality search terms

Constructing a Search

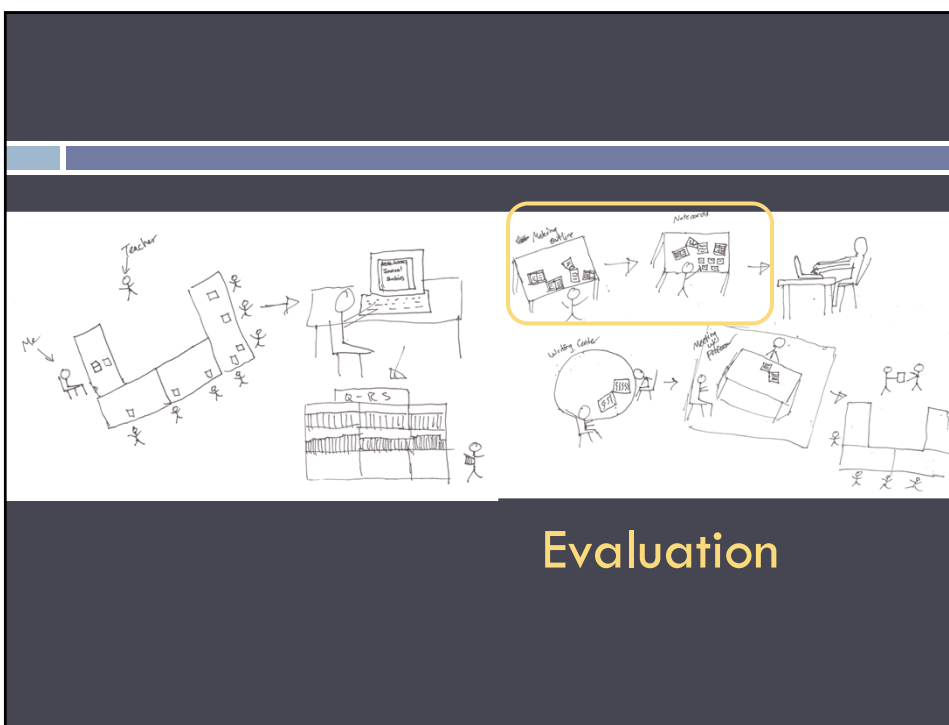
"So, I basically throw whatever I want into the search box and hope it comes up.. .But it's like Google and I use it like Google. I don't know how to use it any other way."

—Junior in Nursing

- Students don't adequately understand
 - ▣ Search logic
 - ▣ How to narrow/expand results
 - ▣ Subject headings
 - ▣ How search engines organize and display results.

"Apparently you don't have much on Rock and Roll"

--First Year in French



Search Evaluation

- Evaluation of potential sources appears cursory

"I never go past the first page."
--First Year in Music Education

- Eclectic, and sometimes inaccurate, methods of source evaluation.
- Minimum expectations of the assignment rather than the most relevant or most useful sources.

". . .I'm lazy and I use the internet."
--First Year in Math

Search Evaluation

- Assumption that if information is not easily found then it must not exist.
- Remarkable ease in changing topics to fit information.
- Pass up unique topics in favor of topics with widespread coverage.
- First few sources define research question.

"I pretty much pick the least amount of work necessary. If I don't have access to it, I search for something else."
--Senior in Women's Studies

Search Epistemology

De facto outsourcing of evaluation to the search algorithm itself.

(Brand Bias) (Default Bias) (Trust Bias)

"I have no idea [how Google determines search results]. I'm just trusting Google to know what are the good resources."
--Sophomore in Biology



Invisible Librarians

- ❑ Very few sought help from a librarian
- ❑ Students didn't understand what librarians do or their role at a university
- ❑ Students will seek help from librarians after a faculty recommendation

"I always assume librarians are busy doing library stuff and it's just not the first thing that pops into my head when I think of a librarian, like helping with papers ..."

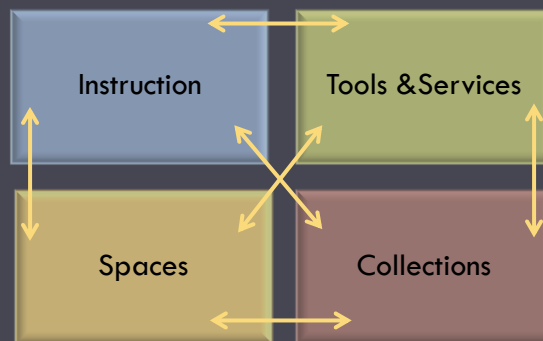
--Sophomore, international studies

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"Strategic Satisficing"

Assessment at IUB

Areas of Assessment



INCITE Project

- Ethnographic study of research assignments
 - ▣ Prospective Interviews
 - ▣ Research Process Interviews
 - ▣ Retrospective Interviews
- Approximately 30 students in 2 courses,
- Fall 2013

Impact of Instruction

- Quantitative evaluation of the impact of library instruction on measures of student success
 - ▣ Engagement
 - ▣ Retention
 - ▣ Completion
 - ▣ GPA

ITHAKA Local Faculty Survey

- Faculty attitudes and practices:
 - ▣ Discovery
 - ▣ Access
 - ▣ Material types
 - ▣ Dissemination
 - ▣ Data preservation management
 - ▣ Role of the library

Reference & Instruction Portals

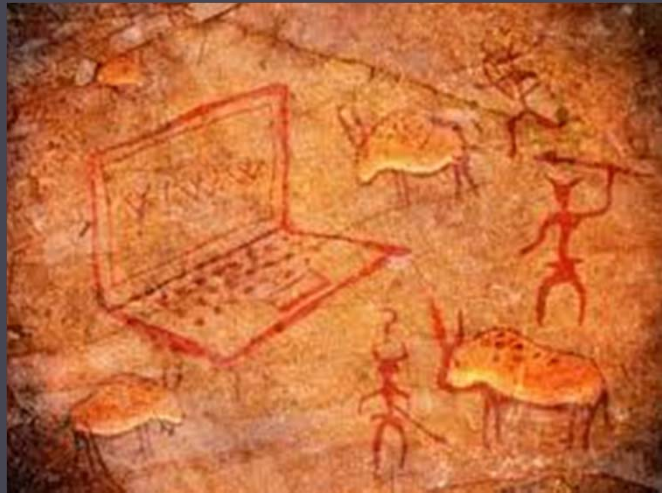
- Enhancements to data collected
- Development of a module for research consultations
- Linking of data between the portals and to institutional data

Spaces

- Evaluation of dedicated graduate student work space
- Other remodeling projects as they are completed

Stay tuned. . .

“Digital Natives” are a myth



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Evaluation



Questions?



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