Building the Instruction-Optional Website:

Evaluating User-Centred Design in Libraries

WILU 2009
Tina Bebbington, Kathryn Paul,
Rebecca Raworth, Nancy Stuart
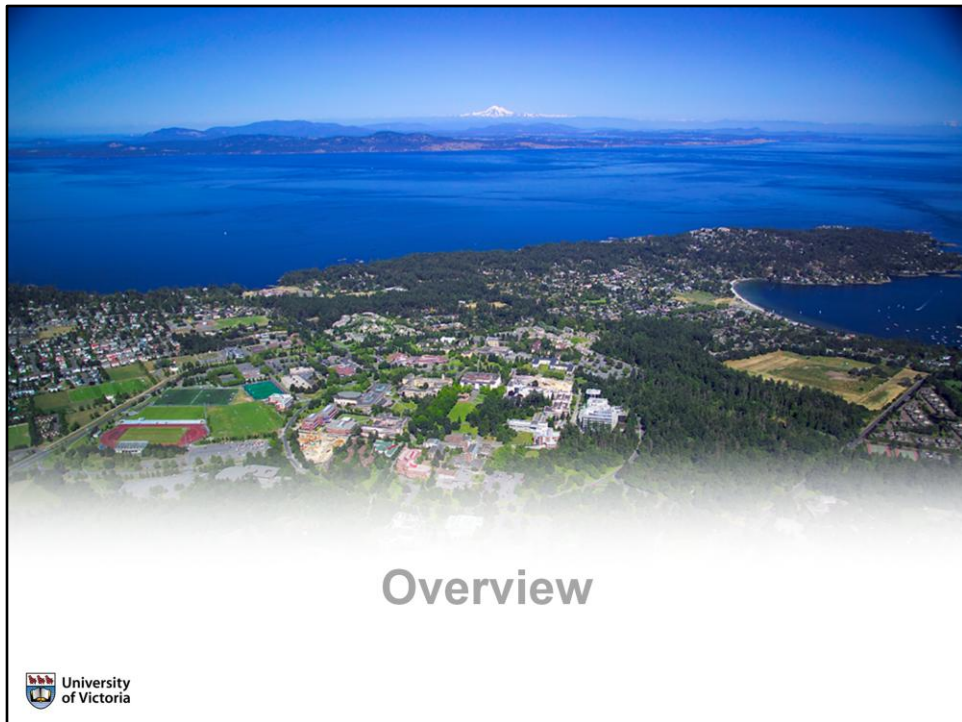University of Victoria Libraries

RR

Salut! My name is Rebecca Raworth and I'm the medical librarian at the University of Victoria and a member of the Web Redesign Team. I'd like to introduce 3 other members of our Redesign Team: Kathryn Paul, the Project Lead; Tina Bebbington, the history librarian; and Nancy Stuart, who brings a unique focus as a technical services librarian.

Today we're going to talk about building the instruction optional website. By that we mean a site that is so usable/intuitive that there is little or no instruction needed. Why would we talk about this at WILU, a conference devoted to instruction in library use? As Stanley Wilder said in 2005 "Information literacy is harmful because it encourages librarians to teach ways of dealing with complexity rather than trying to reduce the complexity." We're interested in the relationship between website usability and instruction. Is infolit dead if we build a completely intuitive website? Is it even possible to build a completely intuitive website? Does it matter?

Our supposition is that an evidence based library website reduces or negates the need for basic library instruction for students.

Overview

RR

Here's an overview of beautiful University of Victoria and an overview of what we'll be presenting today:

•First, I'll talk about the environment in which we exist right now, the threat to academic libraries in the Google generation

•Next, Kathryn will speak about the evidence we used in our redesign, (including usability), and our guiding principles

•Tina/Nancy will then briefly describe our methodology and challenges

•And we'll conclude with a discussion of the viability of information literacy in the 21st century academic library

•We will also be handing out a printed bibliography at the end of our session and posting this presentation on E-LIS - eprints in library and information science. The url will be on the handout.

Google™ Canada

vs.
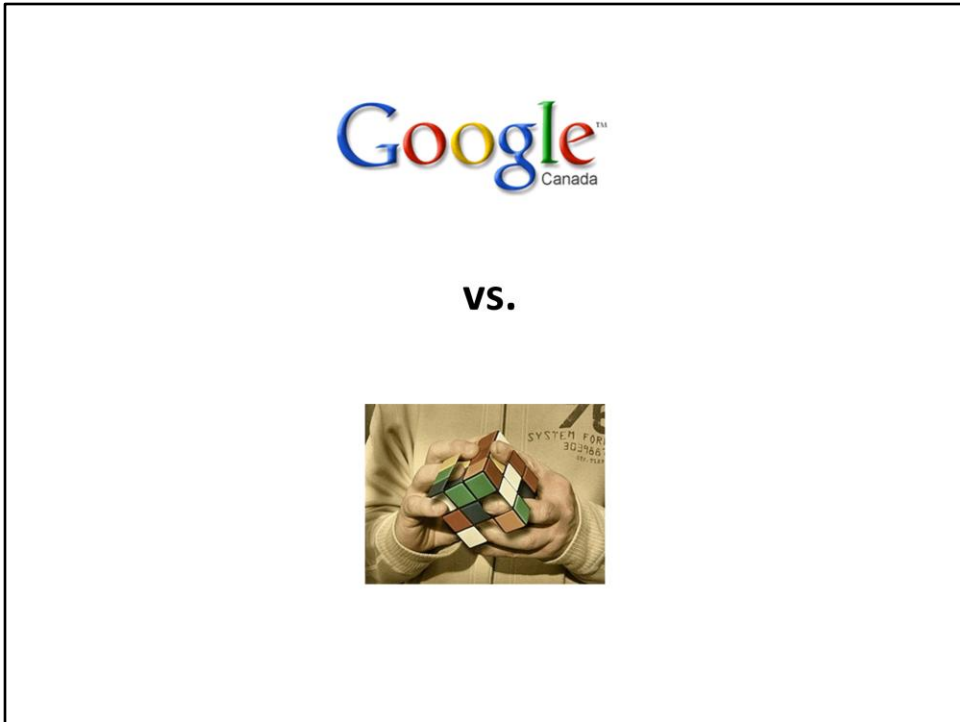
RR

So **are** academic libraries relevant in the age of Google? I'm sure you've all read some of the recent reports out there lamenting the future of the library. **What are some of the threats** that academic libraries are currently facing?

-Google (why is it a threat? It's obvious how to use it, can access it anywhere, it's free, it's easy, it's quick, what undergrads find on Google is often good enough)

We know that Google is the first resort for more undergraduates doing research. Why? Because it's quick and easy. Because instruction classes aren't needed for searching Google effectively. The CIBER report published in 2008 identifies the high usage of search engines for academic purposes and explains it is not just young people but seemingly all age and professional groups that now follow these same…information seeking behaviours. (University College London (UCL) CIBER group. *Information Behaviour of the Researcher of the Future*. London: University College London, 2008. CIBER Briefing paper; 9. Available from: http://www.jisc.ac.uk/media/documents/programmes/reppres/gg_final_keynote_11012008.pdf)

-people want to access resources 24/7 where they are (not have to physically be in the library)

-Open Access and the change in scholarly publishing – more academic content is on the web

- millenials themselves

-digitization

-mobile devices

Any other threats?

The good news:
The ECAR *study of undergraduate students and information technology, 2008*, found that 93.4% of undergraduate students use the college/university library website weekly. Let's make it as usable as Google!

But "Our patrons expect to retrieve and manipulate information without the mediation of the library staff (Campbell, J.D. 2006 Jan/Feb. "Changing a cultural icon: the academic library as a virtual destination." Educause Review 41: 16-30. In light of our users' behaviour and expectations, we **must** develop a web site that better facilitates self-service.

If we want to make the library the first resort instead of the last resort we need to make things quick and easy. How? By making our websites more google-like.

The UVic Libraries web redesign team went into the redesign process amid all these threats but usability testing helps us get closer to the goal of being easier and quicker for our users. Now Kathryn will talk about the evidence we used in the process of our redesign and the guiding principles to which we are committed.

KP

"developing a Web or intranet site without usability testing is about as foolish as tailoring a custom cashmere jacket without first taking the buyer's measurements" (Head 1999, 22).

We went into the library website redesign with the goal of making the website as usable as possible. The full meaning of usability goes well beyond a site's intuitive virtues and the "look and feel". Jakob Neilsen (often called the father of usability) identifies five attributes of usability: easy to learn, efficient to use, easy to remember, causes few errors, and it is pleasant to use.

With this goal in mind we developed a set of guiding principles.

What you see before you is a wordle, a visual representation our guiding principles that we developed and tried to follow in the website redesign.

1. What jumps out immediately from the wordle are 2 key principles – User tasks – we wanted to organize the site based on user tasks and their frequency – in other words give the user what they want and put what's important up front.

2. The second concept is to use evidence provided by usability testing , analytics and user survey to make our design choices. By using an evidence based approach, we were often able to circumvent arguments from library staff about what should be on the front page. For example: Special Collections

3. A third key principle that we followed is our belief that our **users want to be independent** and the website should be, as reasonably possible, an **unmediated experience.**

Recap
Website designed based on user tasks
Use evidence to guide our decisions and evidence from a wide variety of sources.
Website should promote user independence.

'Feeling' Data

'Doing' Data

LibQual Survey

Focus groups

Written feedback

Faculty small talk

Usability Testing

Google Analytics

Usage Data from:

- MetaLib
- Databases/Indexes

KP - Our Evidence

There are many sources of data regarding the libraries website – the feeling data on the left and the doing data on the right.

While the feeling data is interesting, it is mostly about people's perceptions or beliefs. Rather than asking people how they feel about a website or asking them how they would go about doing a certain task, it is infinitely more revealing and valuable to actually watch and record how users do a tasks.

Our "doing" evidence on the right side, and usability testing in particular, is all about **"real" users doing "real tasks"** to achieve a goal. The fundamental belief underlying usability testing is that data from actual users is essential to understanding how a service or product is used.

We also have been collecting "hard data" from our Google analytics program as well as usage stats from our MetaLib application. Google Analytics and MetaLib program provide us with a wealth of information on how many users a day are using our site, where they are coming from, which pages they are using and much more. We can use this data to support our design decisions or make a change as it becomes apparent.

We know that between 5000-7000 users/day were using the libraries website, we know that primarily they were looking for articles (not books) and that on MetaLib (our federated search application), the average number of daily sessions was 7460. That's the data for March 2009.

Making use of the hard data has really allowed us to make better, more informed decisions and has enabled us to not react in knee-jerk fashion to people's individual concerns.

Example: We have found that when providing feedback, people often blame the website, when in actual fact, the problem resides with the catalog, an individual database interface, or some other application such as ebook readers that has little to do with the website.

Nirvana/Promised Land/Utopia

Image: 'to the sand in the sunset'
www.flickr.com/photos/96278894@N00/217261783

KP
So the question is - Using our evidence based approach – is it
possible to reach nirvana – a truly usable website? This was our goal?

IntangibleArts (from Flickr)
http://www.flickr.com/photos/intangible/1500075641/sizes/m/

TB

We're here at a conference focused on Information Literacy but we believe that it's time for IL to take a back seat to making our web sites easier to navigate for our users. If you think of the drooling dog as Information Literacy, it's taking a backseat to the driver in the front – the driver representing our user who wants to be self sufficient.

It's not our users who are broken and need 'fixing' with IL. It's our systems that are broken. We should all focus our efforts on removing the barriers rather than training users to become like us – librarians. Technology and usability can help us.

Now that instruction is taking aback seat and our users are in the driver's seat, who are our users?

Flickr - http://www.flickr.com/photos/71753457@N00/525497288
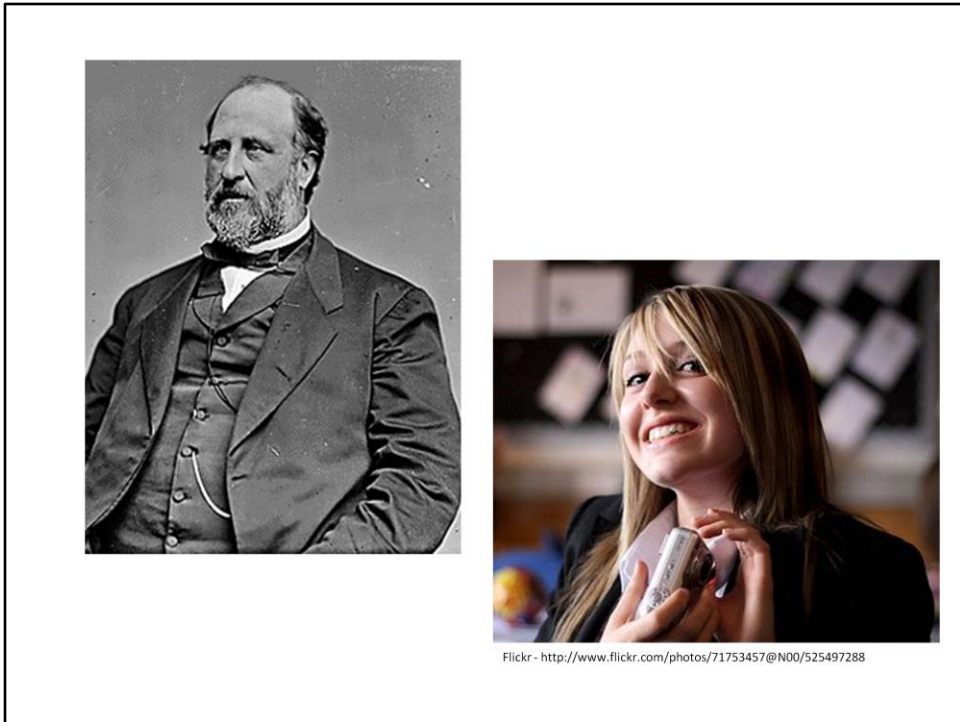
TB - We have to meet the needs of all users, from Dr Tweed to Tiffany , the Undergraduate.

Libraries, librarians and our web sites are still primarily set up to serve traditional users like Professor Tweed. Because of the way libraries are set up with silos of information, the e-journal silo, the books silo, the e-books silo, the research guides silo, the catalogue silo, etc. we're used to having to provide library instruction to enable our undergraduate students to find what they need.

Our traditional users, like Professor Tweed, began doing library research when there were fewer silos, therefore the complexity involved in finding what was needed was much less than it is today. Professor Tweed typically loves browsing and has all the time in the world for it, is change averse, and expects library staff to search for and fetch materials for him. When he has a problem, he picks up the phone and calls the UL. He's very concerned with "academic standards" and for his students as well.

Our new reality is that our students are primarily millenials.

Millenials like Tiffany were born digital, don't need to spell (Google helps them here), are unfamiliar with traditional library terminology like interlibrary loans and reference and reserves, feel supremely confident that they know how to search the library web site well, want novelty to keep things interesting, multi-task, text, use IM and facebook while writing their essays, want information fast, don't scroll, prefer images to text, want self-service and have a sense of entitlement. Futhermore, they are starved for time and prioritize what little time they have for things they feel are very important – everything else gets quick treatment, where possible.

If most of our users are these millenials, why don't we design our web site primarily for them? Our environmental scan led us to decide to focus on this group, but this brought about some very real challenges…

1.   We have multiple and very diverse user groups. Trying to be all things to all people from Professor tweed, to international students, millenials and more. We decided that it is best to focus on the biggest market – our undergraduates – the millenials. This however, impacts buy-in from faculty and library staff.

Change is scary…

Challenges

Due to environmental scan we decided to focus on millenials – this bought about some challenges….

Multiple and very diverse user groups: Trying to be all things to all people from Professor Tweed, to international students, millenials and more. Best to focus on biggest market – our undergraduates, the millenials. This, however, impacts buy-in from Faculty and library staff.

Change is scary!

Our Process

NS
I will now describe some aspects of our usability testing process.

1.Developed the questions. –We had a total of 19 questions many of which were the same questions that we had asked in a previous usability study in 2005. This gave information as to whether our participants performed the tasks in a different way with a new website design, but always asking the same question. The questions were pretty typical – Does the library have the following book, journal, find articles on a particular topic. We also asked questions regarding library policies and services – eg – What is the fine for an overdue book? The participant was required to say out loud they had found their answer.

2.We obtained 31 participants in total from each user group - undergrads, grads and faculty

3.. Individual appointments were scheduled and an impartial staff person administered the test which lasted for approximately 40 minutes.

4.He also timed the participants as they were doing the questions. (after 3 minutes they were told to stop).

5.Two usability librarians were silent observers, and noted whether the participant answered the question correctly and whether they took a direct or indirect path to answer the questions. It was very difficult for us to remain silent as we are trained to be helpful. It was especially hard to watch people hovering on a page with the answer right in front of them, but not seeing it.

6.We then analysed the data from each participant.

7.We used a very low tech approach but in future testing, we may incorporate video recording of the sessions.

8.We also realized the need for ongoing usability testing and hope to explore this possibility.

Image: '365 5'
www.flickr.com/photos/69836574@N00/2521118704

TB - What did we learn?

1. User centered design – We tend to think of user centered design as a motherhood issue - right ? We are all for it. Well it proved to be a hard sell for library staff and administration. For example, many units are used to keeping information about their units on their own pages and were reluctant to contribute information to a central FAQs database. You had to navigate to a unit page to find information about loan periods rather than presenting borrowing information all on one page.
2. The library website (and the library) is not as central as we think it is. For example, faculty use the web site only once a month.
3. The use of the website varies greatly between millenials and non-millenials. Millenials tend to be very comfortable using site search to find information whereas non-millenials tend to methodically read /browse each page. One of our senior participants had a visible visceral reaction to the Site Search page. On the other hand, the millenials who are used to searching Google tended to use Site Search with no trouble.
4. Importance of spelling. Spelling errors in our testing lead to many unsuccessful results. Users who are used to internet searching are accustomed to a spell checker. For example, one of our test participants misspelled the word "Curriculum" when looking for our Curriculum Library – she acknowledged the spelling error out loud but made no move to fix it, and ultimately was unable to find the page she was looking for. Spelling also is extremely important in OPAC searching and students seemed unaware of the fact. The book that we asked them to find was called "Neuropsychology and cognitive processes in reading". The word Neuropsychology was misspelled very frequently.
5. The significance of web page design. Example – text heavy long pages that required reading and scrolling led to failure. Librarians are known as super readers, but students will read an average of 10-20 words before giving up on a web page. Also most users tends to skim text and really only read hyperlinks. And forget about putting any useful information "below the crease".
6. Language and jargon is still an issue. Examples – we had a question about library fines but we call them penalties on the site – rendering site search useless in this case.
7. It is very important to keep faculty happy and we are working on ways to do this. We're designing a web page specifically for faculty and looking at ways to make it more visible.
8. Students said, repeatedly "I wouldn't do this on your website". Especially in reference to finding statistical information from Statistics Canada. We are not their customary starting place for most tasks. There is little or no awareness of authentication issues.
In summary, practical lessons about user behavior in usability testing had a huge impact on how we now think about our site, plan and design it, and how we interact with our users. Reading about each of these issues in the OCLC student perception report, for example, simply didn't prepare us as we saw it in action.

www.flickr.com/photos/41894140117@N01/3077404248

KP – Our conclusion

We think that usability and instruction are linked and that there is a direct correlation between usability and instruction. As you can see on this seesaw, if the figure on the left goes up, the figure on the right goes down.

If you add a little usability to the left hand side, then the balance shifts and the right side goes down - you have to do less instruction or at least start your instruction at a different level. The more usable a website, the more user independence and less need for instruction.

KP

We believe that instead of focusing our energies on teaching students how to navigate library resources, we should focus our instruction expertise on library website design. We should be working harder to remove the barriers for our users and that . instruction librarians should become active participants in website design and website usability.

If there is less need for basic instruction, we can then think about how to change and structure our own instruction sessions. Do we really need to be teaching complex boolean logic when our systems don't require it, and relevance ranking.   Do we really need to be teaching subject headings when keyword searching is the norm? Do we even need to be teaching about particular databases, when federated search options and Google Scholar are readily available. Do we need to search about peer review articles, when our systems will find peer reviewed articles only. As the publishing model changes and more open access becomes available, can we still use the argument that library databases are the only choice for quality peer reviewed items?

There are so many new library technologies on the horizon that will make it even easier for our users to discover quality material – new resource discovery layers for our opacs and google-like approaches for integrating the finding of books and articles.

Are we somewhat guilty of perpetuating the idea of the complexity of our resources and our systems so as to perpetuate our roles in the institution.

Open your mind.
UVic Libraries
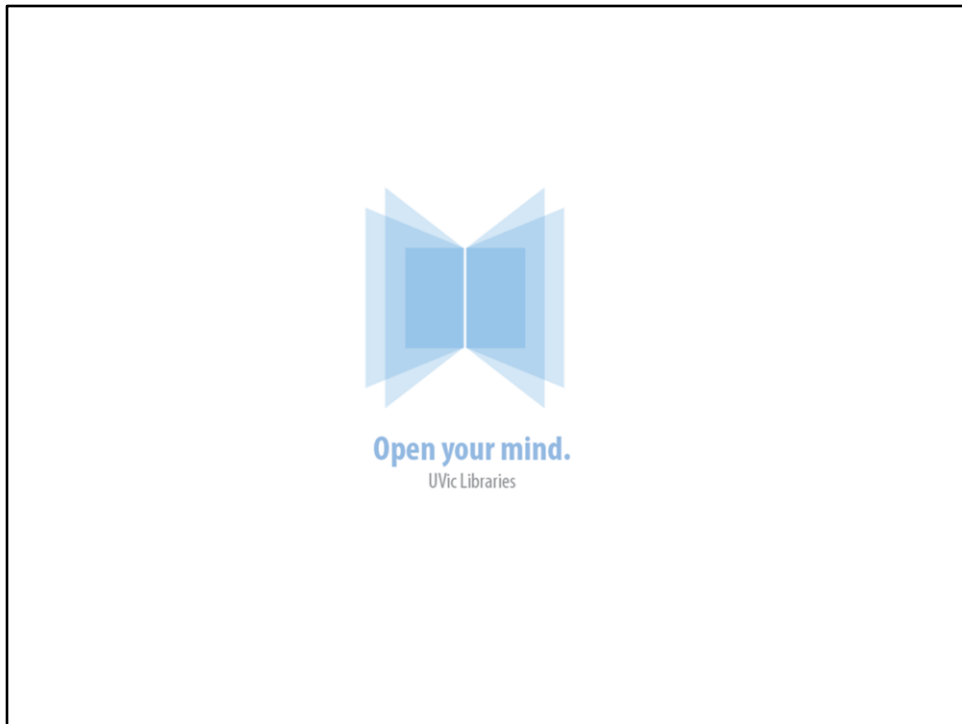
KP

UVic Libraries recently went through a branding exercise where we decided on a new icon and tagline. The tagline is "open your mind" and the image is that of an open book. When I first heard the tagline, I didn't particularly warm to it. I thought if was slightly insulting and didactic. However I have since changed my mind.

Open your mind is exactly what we are asking you to do – open your mind and think about better ways to focus your energies so as to enable our users. Think about changing your instruction classes and think about participating in efforts to make your websites and your resources more usable. The very least is to get the conversation started at your own institutions.

Questions (Gomez)

http://www.flickr.com/photos/intangible/3523427897/sizes/m/

What if…

The End