

“My Information:”

Digital Libraries, Social Networking & the User Experience

Joan K. Lippincott

Coalition for Networked Information

September 2010

Coalition for Networked Information (CNI)

- ▶ Founded in 1990 by ARL and EDUCAUSE
- ▶ Mission: accelerate progress in digital information related to research and education
- ▶ 200+ member institutions
- ▶ Executive Director Clifford Lynch
- ▶ www.cni.org
- ▶ Subscribe to cni-announce

CNI Website - Information for current topics

- Over 30 project briefings 2X/year
- Identifies key trends in digital content, institutional strategies, network technologies
- Links to additional information



Coalition for Networked Information

Project Briefing: Spring 2010 Membership Meeting

Digital Scholarship in an Academic Research Library: UVA's Scholars' Lab

Bethany Nowviskie
Director, Digital Research & Scholarship
University of Virginia

Michael Furlough
Assistant Dean for Scholarly Communications
Pennsylvania State University

Anne Houston
Director, Humanities and Social Science Services
University of Virginia

The presenters represent the ghosts of facilities past, present, and future in this discussion of the Scholars' Lab at the University of Virginia (UVA) Library. The Scholars' Lab was created through a partnership between UVA's library and central information technology divisions in 2007, by merging successful centers for electronic text encoding, geospatial and statistical data, and research computing support. It now serves as a site for intellectual programming, advanced technology use, training, and collaboration around the digital humanities and social sciences, and is the public face of the Library's Digital Research & Scholarship Department. Furlough, under whose guidance the Scholars' Lab was created, will discuss the process of planning, design, and space renovation, as well as the drafting of agreements among collaborators. Nowviskie, his successor, will describe the current scene, including staffing, the integration of a research and development team, and popular programs such as a graduate fellowship in digital humanities. She will also address the ways in which the initial model for the Lab was adjusted to maximize the Library's contribution to the intellectual life of the university. Houston, who is responsible for a broad range of humanities and social science services in the Library, will discuss a planned classroom renovation project designed to promote collaboration between her department and the Scholars' Lab.

<http://lib.virginia.edu/scholarslab/>

[Handout \(PDF\)](#)

Themes

- Why we need to rethink the virtual and physical presence of libraries, museums, archives
 - Changes in users
 - Changes in technologies
- Implications and examples
- Conclusion

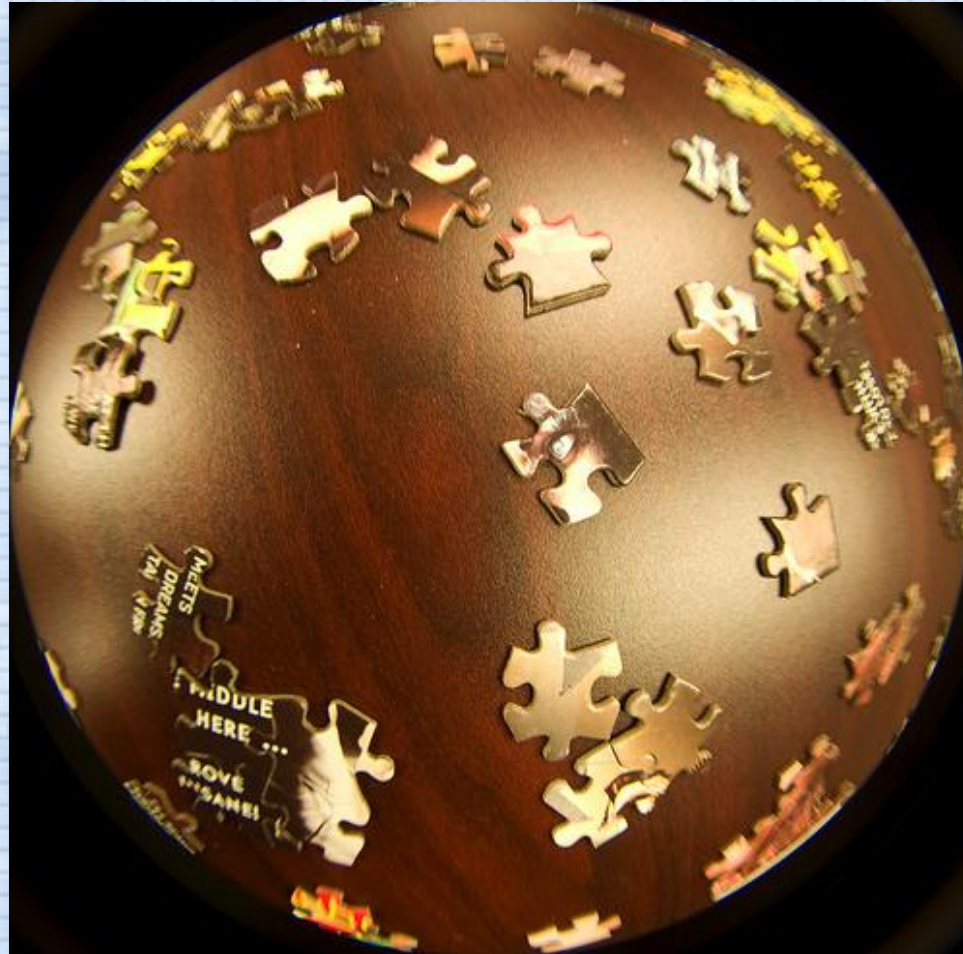


North Carolina State U. Library Information Commons

Many of our institutions were created when

- Information was scarce
- Physical presence was required for access
- Mastery of information was the key educational goal
- Using libraries and archives and visiting museums were considered experiences of the individual, not the group

How do we develop our institutions to serve a changing population in a changing world?



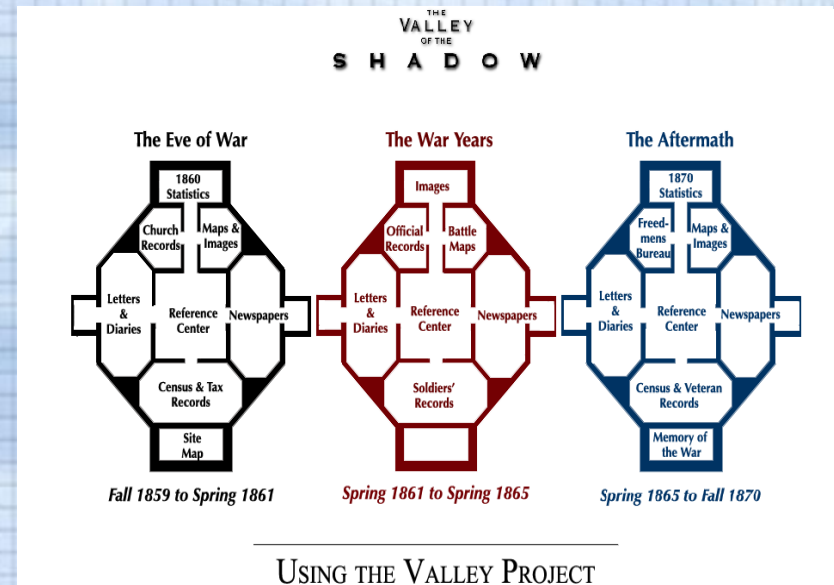
<http://www.flickr.com/photos/jasonyungny/2555631888/>

Understand characteristics of change to inform actions

- In our communities
- In the technology environment

Information Seekers to Creators

- ▶ Faculty, students, and individual citizens are creating new types of digital content
- ▶ They access information and add value by providing context, remixing, showing connections



<http://valley.lib.virginia.edu/>

While technology skills vary...

- ▶ 67% of students in grades 9-12 maintain a personal website
- ▶ When asked what they do regularly with technology for schoolwork, 27% of K-12 students said they create slideshows, videos, and/or webpages
- ▶ Project Tomorrow <http://www.tomorrow.org/speakup>

Today's students are both knowledge seekers and creators



Student Video Projects at Dartmouth

[Home](#)

[Past Project Assignments](#)

[Gallery of Projects](#)

[Testimonies](#)

[Preparing](#)

[Evaluating](#)

[Online Assignment Form](#)

[Handouts](#)

[Links of Interest](#)

[Site Technical Support](#)

[Contact Us](#)

Gallery of Projects

If you experience technical difficulties when trying to view the projects, go to the [Site Technical Support Page](#) for troubleshooting download QuickTime.



Arabic 3: First Year Courses in Arabic

Instructor: Prof. Diana Abouali and Lorice Kasbari (two sections)

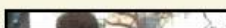
Assignment:



Art History FSP in Florence

Instructor: Prof. Adrian Randolph

Assignment:

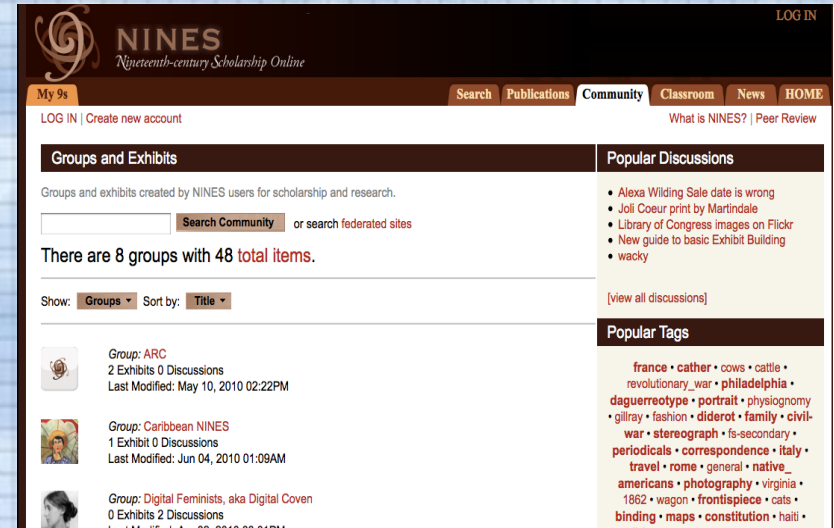


English/Native American Studies: Native Cultural Production: (Re)Mapping Race, Gender, and Nation

<http://www.dartmouth.edu/~videoprojects/gallery.html>

Nines: A Community of Scholars

- Nineteenth century scholarship online
- Provides peer review of digital resources and archives in field
- Federated online publishing model
- Community of scholars



<http://www.nines.org/>

Solo Readers to Communities

- Amazon recommendations
- Community-wide reads include online blogs, in-person events
- Shelfari - used by school groups, fans



<http://www.shelfari.com/>



Passive Consumers to Active Learners

- Providing information and technology-rich opportunities for students
- Using digital content in instruction and in student assignments
- Creating new types of learning objects for independent and social learning

We can use technologies to encourage active learning

- ▶ Integrating information resources and links to online reference into LMS
- ▶ Using twitter, blogs, wikis for exchange of information
- ▶ Developing interactive applications

UNIVERSITY OF MINNESOTA One Stop | Directories | Search U of M

 **ASSIGNMENT CALCULATOR** *beta*
YOU CAN BEAT THE CLOCK! 

[Log in](#)

Students -- Get control over your assignments!

- Assigned a research paper? A speech? A video? Not sure where to start? Use the Assignment Calculator to complete these on time.
- Get email reminders to help stay on track.
- Check out these [quick tips](#) to get the most out of the Assignment Calculator.

Instructors -- Give students a step-by-step breakdown of your assignments.

- Adapt basic assignments for research papers, speeches, videos to your deadlines and requirements.
- Provide students with manageable tasks to complete major projects on time.
- Check out these [quick instructor tips](#) or [video](#) to get the most out of the Assignment Calculator.

Developed by the University of Minnesota Libraries in partnership with the Center for Writing, Center for Teaching and Learning and the Writing Studies Department.

[Link to the old Assignment Calculator](#)

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The University of Minnesota is an equal opportunity educator and employer. Last Modified: April 03, 2010

<http://www.lib.umn.edu/help/calculator/>

Assisting Faculty to Develop Active Learning Strategies




- ▶ Engaging students with multi-media content and social networking and digital information
- ▶ Faculty workshop at U. Pennsylvania Information Commons

David B. Weigle Information Commons

Find It: Anywhere

Home How Do I? WICshops Facilities About

Engaging Students Through Technology 2010







Third Annual Symposium   
Friday, October 15, 2010, 10:30 am to 3 pm

We live today in a state of 'continuous partial attention'. Instant access to people and information can both engage and distract us. New tools break down classroom boundaries and change the nature of college education. This year's symposium explores the creative ways faculty are integrating technologies into teaching, the challenges they face, and the disruptive nature of mobile technologies in lecture contexts. The day's program will include faculty presentations, hands-on exploration and small-group discussions. The symposium is open to Penn faculty and instructors. Interested graduate students should email wic1@pobox.upenn.edu to be included on a space-available basis. [Register now!](#)

10:30 am to Noon Faculty Panel Fisher-Bennett 401	Noon to 1 pm Informal lunch with presenters WIC Data Diner	1 to 2 pm Student Panel and Tech Explorations Concurrent sessions	2 to 3 pm Disc. Group and Tech Explorations Concurrent sessions
----------------------------------------------------------------	-------------------------------------------------------------------------	--------------------------------------------------------------------------------	------------------------------------------------------------------------------

Faculty Panel - 10:30 am to Noon

Six ten-minute presentations on how and why a particular technology works with each person's teaching goals:

 Regina Austin Student Created Videos	 Andrew Lamas Visual Expression	 Carol Muller Interactive Music Histories	 Kris Rabberman Online Collaboration	 Ralph Rosen Facebook	 Mark Yim Disruptive Technologies
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<http://wic.library.upenn.edu/>

Developing Active Learning Materials: WolfQuest from Minnesota Zoo

- Interactive online game to learn about wolf behavior
- 4000 people downloaded game in first hour; now 250,000
- Players formed community
- 80% also sought additional information and/or visited a zoo



<http://www.wolfquest.org/>

Library Builders to Personal Media Collectors

- ▶ Faculty collect most of their information in digital form
- ▶ Students develop media collections that are highly personal

zotero

Goodbye 3x5 cards, hello Zotero.

Home

Groups

People

Support ▾

Get Involved

Zotero [zoh-TAIR-oh] is a free, easy-to-use **Firefox extension** to help you **collect, manage, cite, and share** your research sources. It lives right where you do your work—in the **web browser** itself.



Collect



Organize



Cite



Sync



Collaborate

Cite Anywhere

You're never more than one click from a bibliography.

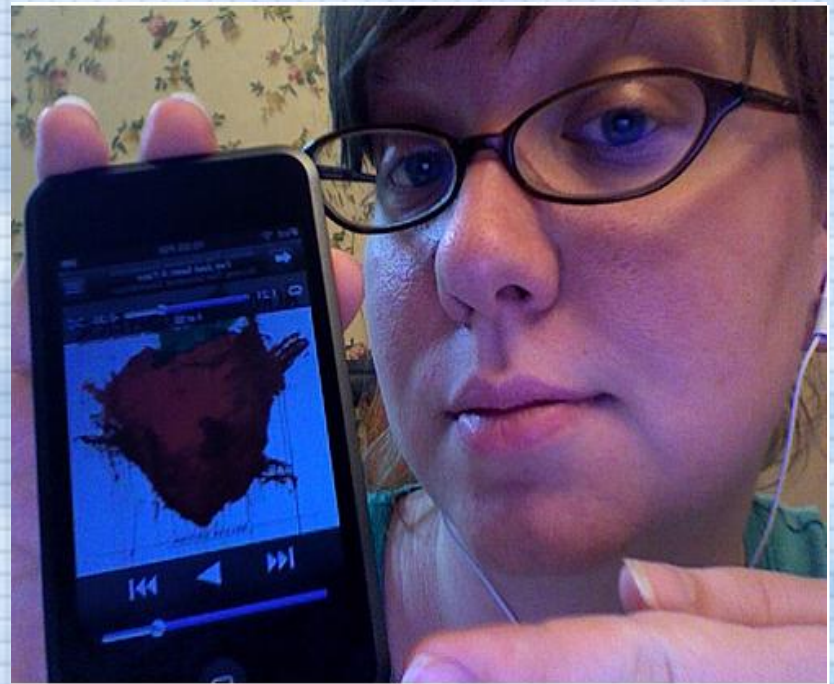
<http://www.zotero.org/>

Information as “extension of the mind”

- 1/3 of Stanford students in survey said they are worried about too much use
- 75% said an iPhone made them happier

"It was not so much with the object itself, but it had so much personal information that it became a kind of extension of the mind and a means to have a social life," Ms. Luhrmann said. "It just kind of captured part of their identity."

http://chronicle.com/blogPost/Students-Worry-About-iPhone/21539/?sid=at&utm_source=at&utm_medium=en



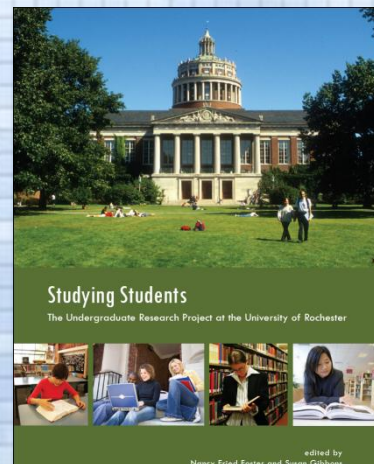
<http://www.flickr.com/photos/valerierenee/2783147354/>

We Can Focus on

- ▶ Services that assist users to
 - ▶ Interact with, organize, share, create information
 - ▶ Address specific, not just generic needs
 - ▶ Demonstrate that we understand their needs in today's information environment

Models for understanding user populations and assessing needs

- ▶ Two studies published by ACRL and available for free download
- ▶ Using qualitative and quantitative methods
- ▶ <http://www.acrl.org/ala/mgrps/divs/acrl/publications/booksmonographs/booksmonographs.cfm>



Changes in Technology

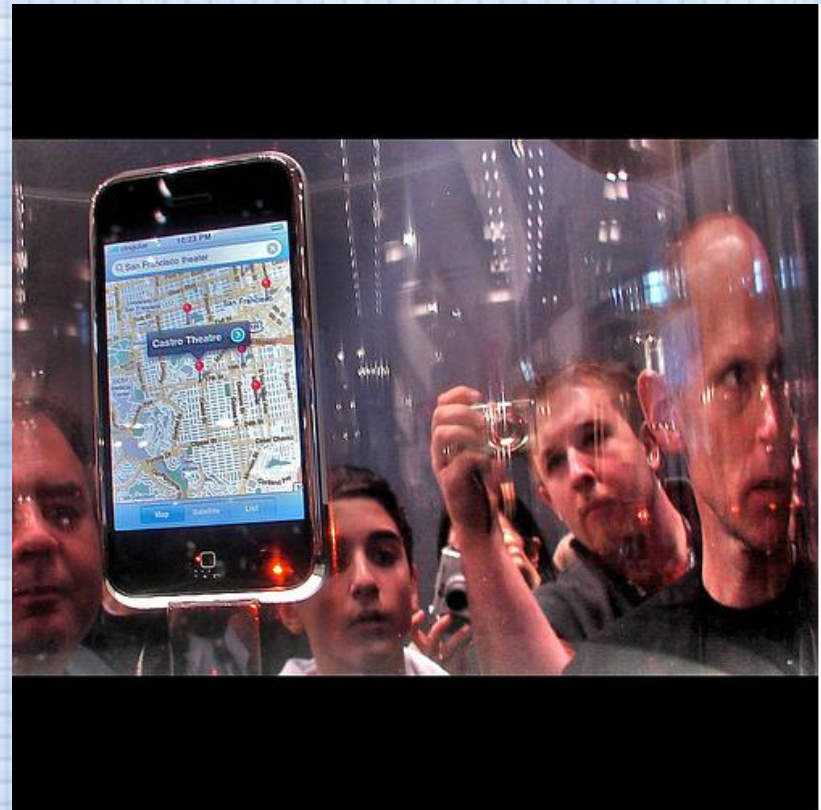
- The move to mobile devices
- Development of specialized applications that increase personal involvement with information
- Changes in platforms



<http://www.flickr.com/photos/ivyfield/4686434290/>

It's a Mobile World; In the US:

- ▶ 93.9% of freshmen own a laptop
- ▶ 66% of college students own an Internet-capable cell phone
- ▶ 71% of teens 12-17 owned a cell phone in 2008 compared to 45% in 2004



<http://www.flickr.com/photos/shapeshift/707543617/>

ECAR Study of Undergrad Students and IT, 2009; Pew Internet, "Teens and Mobile Phones," 2009

Kids “consider their mobile phone to be their best friend.”

- If you had to give up all but one device - desktop computer, laptop, MP3, tv, game console, mobile phone - which would you keep?
- US & UK kids chose mobile phone



<http://www.flickr.com/photos/studentsforhumanity/3522628341/>

Libraries and museums are developing applications

The screenshot displays the University of Virginia Library's mobile application interface. At the top, the University of Virginia Library logo is on the left, and navigation links for Catalog (Virgo), E-journals, Articles, Databases, and This Website are on the right. A search bar with the placeholder text "Type keywords to find books, videos, audio, reference materials, and more" and a "Search" button is centered. Below the search bar is a link to "Go to Virgo for search options >". A secondary navigation bar includes links for U.Va. Home, Libraries, Hours, Map, Depts./Contacts, Questions? Ask a Librarian, Check My Account, and Renew Items. The main heading is "U.Va. Library Mobile". To the right of the heading is contact information for Steve Johnson, Web Developer, with an email address. Below the heading is a section titled "M.LIB.virginia.edu: Ubiquitous Mobility." with a "Home" link. The main content area is divided into two columns. The left column, titled "U.Va. Library Mobile: Version 2 Preview", lists features such as "HI-def" experience for iPhone/iPod, Android, Palm WebOS, and webkit browsers, and "Low-def" experience for Blackberry, Samsung, LG, and practically any other device. It also includes a paragraph about the effort to expand access to online resources and services, and a list of presentations at the edUI Conference 9/22/09 and the U.Va.'s Mobile Awareness Conference. The right column, titled "M.LIB Features:", lists several features with icons: Device Capabilities Detection (gear icon), Integrated Catalog and Periodical Articles Search (magnifying glass icon), Hours & Schedule of Operation (clock icon), Searchable Staff Directory and Department List (person icon), News & Events (RSS icon), and Text/Call a Librarian (SMS icon).

UNIVERSITY OF VIRGINIA LIBRARY

Catalog (Virgo) E-journals Articles Databases This Website

Type keywords to find books, videos, audio, reference materials, and more Search

Go to Virgo for search options >

U.Va. Home Libraries Hours Map Depts./Contacts Questions? Ask a Librarian Check My Account Renew Items

U.Va. Library Mobile

Contact:
Steve Johnson, Web Developer
Email: spj4g@virginia.edu

M.LIB.virginia.edu: Ubiquitous Mobility.

Home

U.Va. Library Mobile: Version 2 Preview

- "HI-def" experience for iPhone/iPod, Android, Palm WebOS, webkit browsers
- "Low-def" experience for Blackberry, Samsung, LG, practically any other device

In an effort to expand access to online resources and services, the U.Va. Library is developing an updated version of the website that is optimized for handheld, web-enabled mobile phones and devices.

- Presentation:** "Capabilities-driven Mobile Web Development" at edUI Conference 9/22/09 (PDF) →
- Presentation:** "U.Va. Library Mobile" at U.Va.'s "Mobile Awareness Conference" (PDF) →

Current release: 1.8 alpha contains known bugs and features which are subject to change.

Features

- Ability to perform "one search" and see results from Virgo catalog and thousands of periodicals/journals (via Summon API)
- "High graphics" version supports newer PDAs with a webkit browser

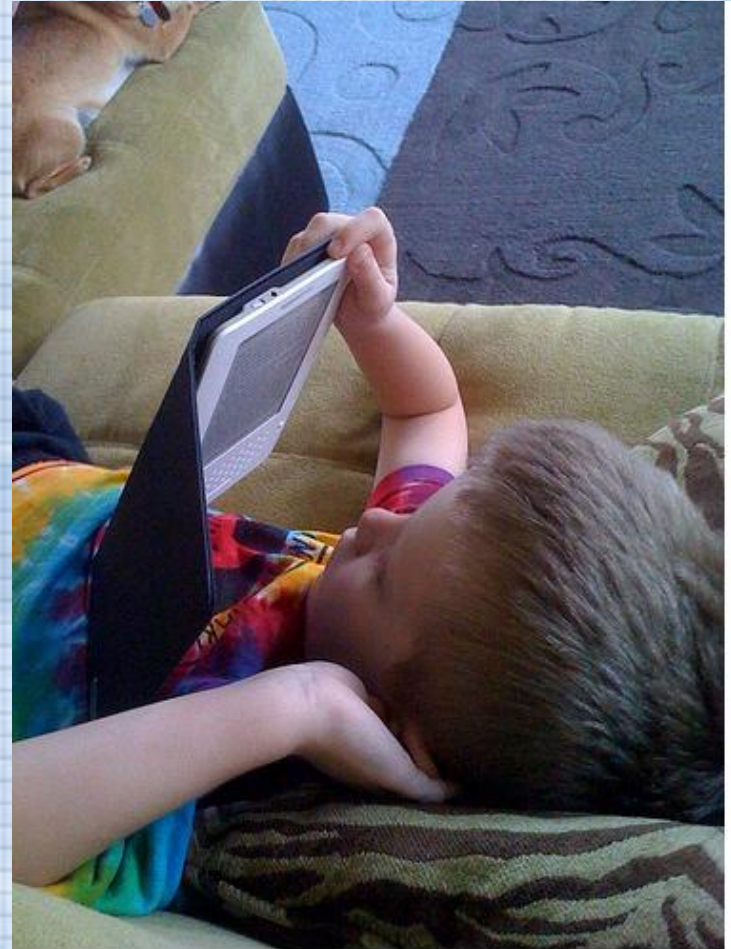
M.LIB Features:

- Device Capabilities Detection**
A fast WURFL inference engine; JSON API
- Integrated Catalog and Periodical Articles Search**
Powered by Virgo/Blacklight and Summon API (evaluation license)
- Hours & Schedule of Operation**
Returns hours for all facilities and upcoming terms; JSON API
- Searchable Staff Directory and Department List**
Integrated with U.Va.'s LDAP; JSON API
- News & Events**
Aggregated News and Events feeds from Labs and Libraries; JSON API
- Text/Call a Librarian**

E-book readers are taking off

- ▶ From NYT columnist:
"My 2-year-old daughter surprised me recently with two words: 'Daddy's book.' She was holding my Kindle electronic reader." Brad

Stone, NYT, 1/9/10



<http://www.flickr.com/photos/ericrice/3351068601/>

Many are reading books on iPhones and iPads

- ▶ "In October 2009, one out of every five new iPhone and iPod touch applications launched in Apple's App Store were book-related. Books and book applications exceeded the popularity of games in the previous four months. It is estimated about 1 percent of the entire U.S. population was reading a book on the iPhone in August 2009. The rise in eBook activity on the iPhone is in direct competition with the Amazon Kindle." Pattillo, Gary. "Fast Facts" C&RL News, 12/09 p. 723. quoting Peter Farago, Flurry Smartphone Industry Pulse, Oct. - Nov., 2009.



QR Codes: New Ways of Connecting Information and People

- ▶ QR codes can link locations, books, etc. to web pages with additional information, links to social networking sites, or phone nos.

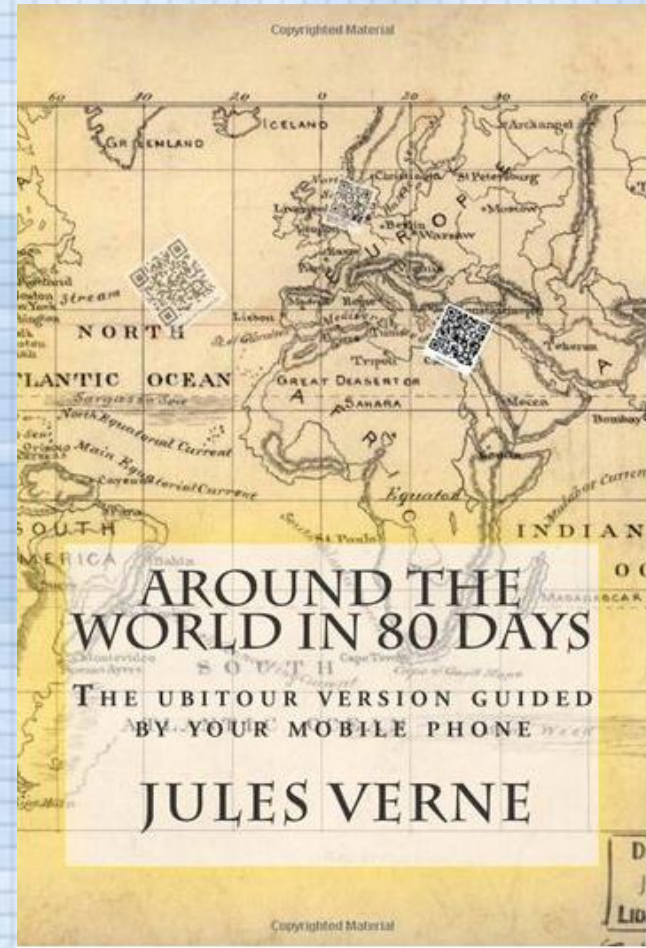
- ▶ Ramsden, A., Jordan, L., 2009. Are students ready for QR codes? Findings from a student survey at the University of Bath. Working Paper. University of Bath.
<http://opus.bath.ac.uk/12782/>



<http://www.flickr.com/photos/cocreatr/2211459923/>

QR Codes: Links to information and community

- ▶ Ubitour version of book employs QR codes
- ▶ Links to
 - ▶ Community
 - ▶ Interactive maps
 - ▶ Historical information
 - ▶ Audio and video links
- ▶ "Your idea of reading a book will be changed forever."



Changing Technologies: “The Web Is Dead”

- ▶ You’ve spent the day on the Internet – but not on the Web. And you are not alone. It’s the world that consumers are increasingly choosing, not because they’re rejecting the idea of the Web but because these dedicated platforms [RSS, Skype, IM, etc.] often just work better or fit better into their lives (the screen comes to them, they don’t have to go to the screen).
- ▶ Chris Anderson in Wired Magazine August 17, 2010 www.wired.com/



How Can We Move Forward?

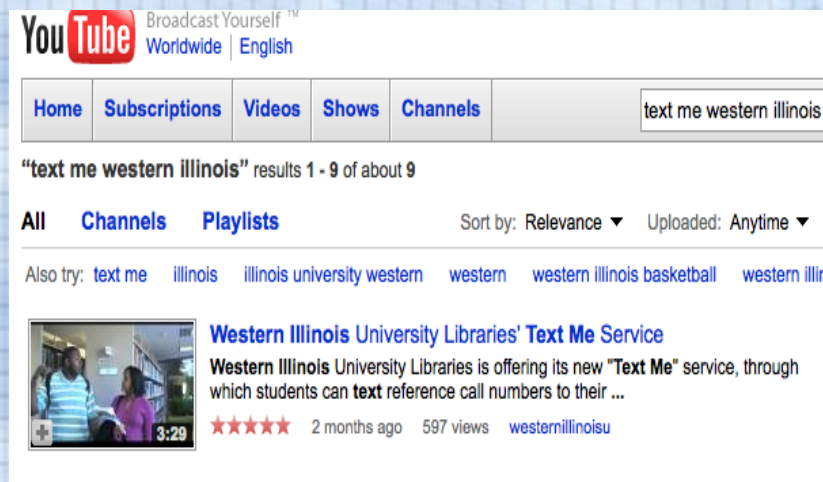
- Support new ways of interacting with information
- Engage communities
- Collaborate
- Make personal connections
- Assess innovative activities and services



U. Utah Marriott Library

Rethink what “Find a book” means

- Old: Find call no. in catalog
- New: Find call no., check availability, get directions to library, find location of shelf on map, link to reviews or conversations about book OR download text
- Ex: “text me a call no.”



<http://www.youtube.com/watch?v=2yjlz1zZ1cU>

Rethink what is included on a library website - science@cambridge



[Help](#) | [Recommend a resource](#) | [Feedback](#)

[University of Cambridge](#) > [Cambridge University Library](#) > [eresources@cambridge](#) > [science@cambridge](#)

science@cambridge

Find resources by subject:

Discover databases, full text services and other resources for your subject area, as well as libraries that cover the subject and contact details.

[Astronomy and Astrophysics](#) [Biochemistry](#) [Chemical Engineering and Biotechnology](#) [Chemistry](#) [Computer Science](#)
[Earth Sciences](#) [Engineering and Technology](#) [Genetics](#) [Materials Science](#) and [Metallurgy](#) [Mathematical Sciences](#) [Medicine](#) [Pathology](#) [Pharmacology](#) [Physics](#) [Physiology, Development and Neuroscience](#) [Plant Sciences](#) [Veterinary Medicine](#) [Zoology](#)

General Information Skills

- [Intute: Virtual Training Suite](#)
- [Open University Safari: Skills in Accessing Finding and Evaluating Information](#)
- [Good Academic Practice and Plagiarism](#)

Science Social Networks

- [Research Gate](#)
- [Nature Networks](#)
- [2collab](#)
- [Within3 \(for Medics\)](#)

Science Podcasts

- [Nature: 2 October 2008](#)
- [Naked Scientists 08.09.28 - Young at Heart - Healthy Ageing](#)
- [Science Weekly: Extreme weather](#)
- [Science Podcast, 26 September 2008](#)
- [Nature Extra: US Election](#)
- [Nature: 25 September 2008](#)
- [Naked Scientists 08.09.21 - Superbugs - MRSA and C. diff](#)

→ [visit the science podcasts web site](#)

Recommended iTunes U Sites

- [University of Cambridge \(coming soon\)](#)
- [Stanford](#)
- [MIT](#)
- [Berkeley, University of California](#)
- [The Open University](#)
- [UCL](#)

Citation Organiser Tools

- [CiteULike](#)
- [Connotea](#)
- [Mendeley](#)
- [Lab Meeting](#)

Useful Links

- [Newton Toolbar](#)
- [The Naked Scientists](#)
- [Oxford Science Blog](#)
- [BlueSci: Cambridge University science magazine](#)
- [DSpace: The Institutional Repository of the University of Cambridge](#)
- [Scirus: a scientific research tool](#)

New Science eResources

- [Botanical Review \(ISSN: 0006-8101\)](#)
- [Scopus available to University of Cambridge](#)

Science News from the University

- [Like an arrow: jumping insects use archery techniques](#)
- [Possible cause of antisocial behaviour identified by Cambridge scientists](#)
- [Naked Scientists go National](#)

Selected Science Blogs

- [My book is out the door \[Evolving Thoughts\]](#)
- [All the President's Scientists \[The Intersection\]](#)
- [Vote for Change \(under Lorentz transformation\) \[Built on Facts\]](#)
- [Taking the new out of neurons \[Not Exactly Rocket Science\]](#)

New Books from CSL

- [Gums and Stabilisers for the Food Industry 14 \(Special Publications\) by Peter A. Williams](#)
- [Color Quality of Fresh and Processed Foods \(Acs Symposium Series\) by Catherine A Culver](#)
- [Biomolecular Catalysis: Nanoscale Science and Technology \(Acs Symposium Series\) by Seong H Kim](#)
- [Greenhouse Gas Sinks by D Reay](#)
- [Waste Management and the Environment \(WIT Transactions on Ecology and the Environment\) \(Wit Transactions on Ecology and... by M. Zamorano](#)

→ [visit the CSL new books site](#)

Support Media Production

- Provide equipment, software, content, and expertise as core services



Media workstation at Georgia Tech Commons

YouMedia at Chicago Public Library

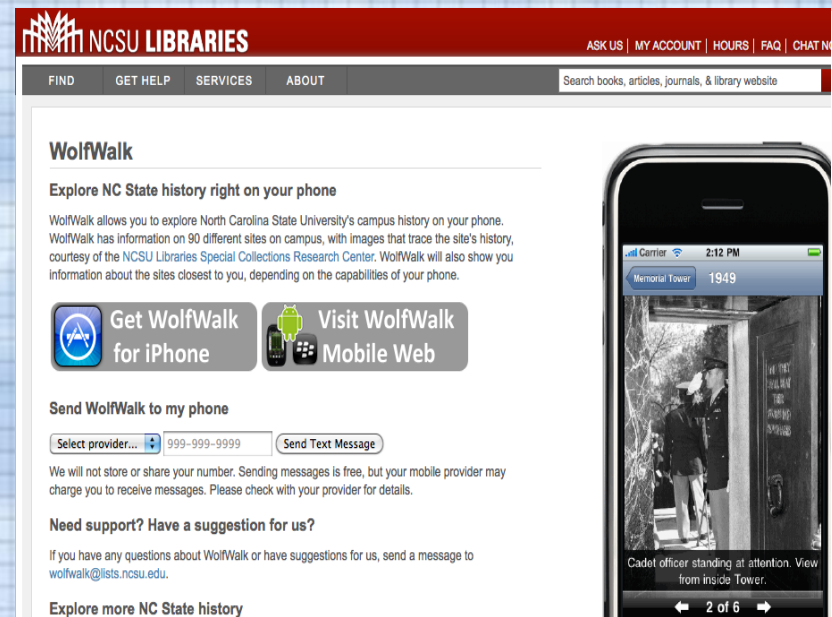
- ▶ “Buzzes with teens hanging out with friends, remixing their own rock videos, tapping into the library’s large collection of youth literature, and using the Internet to dive deeply into issues of interest.”
- ▶ MacArthur Foundation. Re-Imagining Learning in the 21st Century.
www.macfound.org/education



<http://www.flickr.com/photos/shifted/3760722098/>

Innovate: Develop engaging content

- ▶ NC State U. - Location-aware campus tour linked to map with geotagged placemarks associated with images from Special Collections



<http://www.lib.ncsu.edu/wolfwalk/>

Encourage Community Involvement

- Flickr Commons
- Used by US National Archives, Library of Congress, Smithsonian Institution
- Citizens invited to add information and comments



<http://www.flickr.com/photos/usnationalarchives/>

Collaborate: Invite students to partner on information literacy materials

- U. Colorado health sciences students created this guide to medical literature



A Student's Guide to the Medical Literature UCHSC | UCH DENISON LIBRARY

A Student's Guide to the Medical Literature

Welcome! This site has been designed especially for medical students, but it can be used by anyone who wants a guide to the medical literature. If you are having trouble researching a medical question, or want an easy guide to critical appraisal of journal articles, this is the site for you!

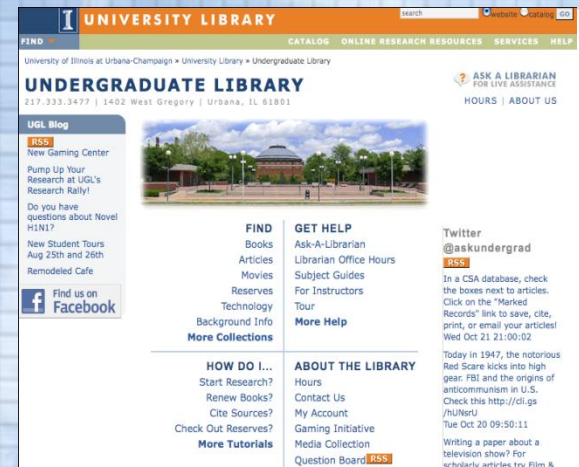
Some of the features of this site are:

- A [Tutorial](#) outlining a simple 4-step approach to reading medical literature
- [Search Strategies](#) with links to the best web sites
- A [Guide to Critical Appraisal](#) of journal articles with step-by-step explanation of the "User's Guide approach"
- An interactive [Glossary](#) with over 150 statistical terms hyperlinked to the text
- [Calculators](#) for finding relevant outcome measures from a study
- [Student's Guide Pocket Version](#) to use on your Palm or Pocket PC



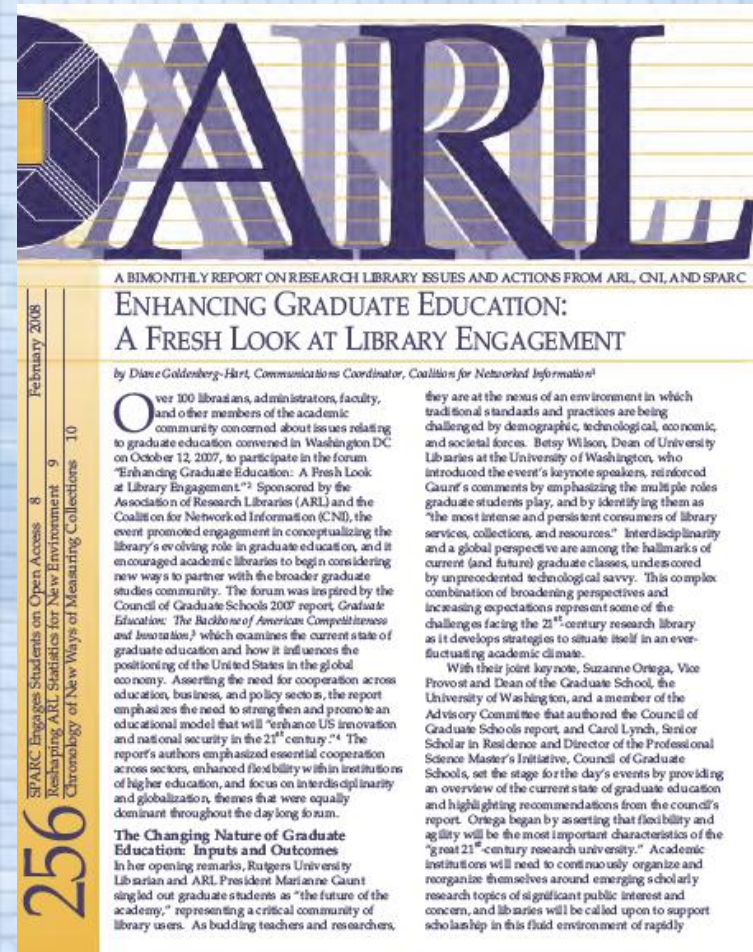
Make Personal Connections

- ▶ Librarian photos and specializations on display at Penn State U.
- ▶ Twitter feed on undergraduate library page at U. Illinois U-C



Assess and Share Information

- ▶ Develop a genuine understanding of user needs
- ▶ Develop useful measures to understand impact of innovations
- ▶ Implement a “culture of assessment”



Conclusion: New Directions

- “But if the changes to the infrastructure are largely known in their direction (**networked information**), **scale** (huge), and aspects (**social/devices/mobile/collaborative**), the challenge becomes, what do we do now?”

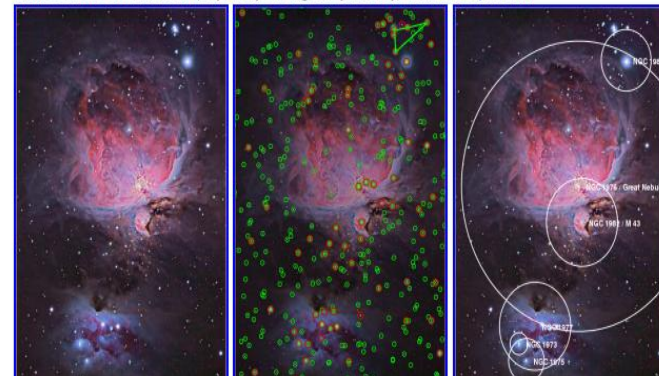


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Gallery of Solved Images

In the images below, the red circles are stars our algorithm automatically detects in the image, and the green circles are stars from our master index which appear in the query image. Nebulae, constellations and other objects can be automatically overlaid on the image after it has been solved.

A shot of the Great Nebula, by Jerry Lodriguss (c.2006), from [astropix.com](#)



<http://astrometry.net/>

Conclusion: New Directions

“Fundamental change is the next step — social, cultural, structural, and personal change will lead to a widespread adaptation, and adaptation means we can embrace the possibilities.

These deeper changes will come more slowly, they may surprise and startle, and many will require leaps of faith, abandonment of comfortable arrangements, and restructuring of artifices we mistake as absolutes.”

Kent Anderson, SSP, September 7, 2010

<http://scholarlykitchen.sspnet.org>

I believe our communities want information environments that are:

- Personal
- Social
- Simple
- Practical
- Useful
- Fun
- **Can we deliver them?**

Thank you!

- All photos used from Flickr have Creative Commons licenses
- joan@cni.org
- http://www.cni.org/staff/joan_index.html



The Link - Duke University