

The Millennial Generation Joins the Library Community

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Managing Electronic Collections:
Strategies from Content to User
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Summary

These opening remarks will help you understand how technology is reshaping the way your users find, access, use and even create information. The session will also help you understand how you need to think about shaping your collections in response to these changes.

Conference Questions

- How can you find out who is using your collections?
- How can you make better collection management decisions?
- What can you do to promote access and use of your collections and content?

Generational Transitions

1925-1945	Silent Generation
1946-1964:	Baby Boomer Generation
1965-1980:	Gen X
1981-2000:	Millennial Generation

Millennial Characterizes

- Innate ability for Technology
- Frenetic multitasking
- Comfortable with diverse types of digital media
- Highly interactive style of working

Caveat

- Don't over generalize generational differences
- Gen X'ers and Baby Boomers are also becoming more Web savvy and have rising expectations
- Also: New librarians entering the profession are part of the Millennial Generation.

Forrester “The Millennials are Coming!”

- They are generally creative, organized, independent, and open to innovation
- Millennials also are impatient, skeptical, and sometimes arrogant in their relationships with others
- Status and authority do not greatly impress them

A Contrast of Generations

Millennials	Older Workers
Accustomed to receiving information quickly and from multiple sources in real time and processing it immediately.	Used to receiving information about it, and digesting it.
Like to parallel process and multitask — i.e., listen to music, talk on the phone, and answer email all at the same time.	Like to proceed step-by-step and do tasks in order.
Prefer to look at graphics and then maybe read the text.	Read text first and then review graphics.
Like to work in peer groups.	Like individual work.
Are more learner-centered with teacher as a guide.	Are more teacher-centered with teacher as the “sage.”

Source: Forrester Research, Inc.

Have little tolerance for delays; expect Web pages to load immediately; generally respond quickly to email.	Are happy when the technology works; show more patience but also experience frustration; tend to do less experimenting with technology but use it for the purpose it was intended and in the manner instructed.
Prefer to “construct” their knowledge from experiences.	Prefer to receive instruction in a logical sequence and understand what they are going to learn and its purpose.
Prefer to interact with peers.	Like the role of listener or viewer.
Tend to be more visual and kinesthetic learners.	Tend to be more text-based learners who are careful observers.
Are flexible, adaptable, and comfortable with the uncertainty that characterizes their change driven world.	Resist change and are uncomfortable with doing things differently but generally find coping strategies to live in this change-driven world.

Source: Forrester Research, Inc.

Approach to study and learning

- **Los Angeles Times: “They Do It All While Studying” reports results of an LA Times/Bloomberg poll**
 - 53% of children ages 12 to 17 said they did at least one other thing while studying
 - 25% of adults ages 18 to 24

Multitasking while studying

■ Passive activities:

- 84% listened to music as a side activity,
- 47% watched TV
- 22% watched a movie.

■ Active tasks:

- 32% talk on the phone
- 21% browse the Internet
- 15% instant messaging
- 13% e-mail
- 13% text messaging
- 6% video games

Shaping Collections for Millennial Users

- Content – digital / immediate
- Discovery – more like the Web
- Access – Anytime / anywhere

Consistent with existing trends

- Satisfying Millennial Gen users does not conflict with needs of library users from previous generations
- Very much in tune with the strategic directions most libraries have toward more digital, more immediacy of access, high quality service
- A matter of degree

An urgent need

- Baby boomers and Gen X'rs are happier with traditional forms of content and existing modes of service
- Millennials will move on to non-library provided information sources and services if not readily satisfied
- There is a lot at stake for the future of libraries in adapting to generational transitions.

Content of Collections

- Key characteristic of Millennial Gen: comfortable with working with content in diverse media
- Not adverse to print, but:
- Digital content satisfies their need for content more immediately available

Multimedia

- Millennials prefer graphics over text
- Music and audio
 - Well experienced: File swapping, p2p, iPod, MP3
- Video
 - Recreational and academic: youtube.com, myspace.com/video, yahoo! Video, bittorrent
- Millennials love to remix. Usually recreational, but explore ways to tap this interest with an academic slant.

Library collection possibilities

- E-journals, e-books (we're doing that already)
- Podcasts of lectures
- video libraries of stock footage
- News archives
- Data sets: census, GIS

Access to Collections

- Best opportunity for impact
- Building collections well underway, but how best to provide access
- How to respond to their preferences:
 - Immediate
 - Collaborative
 - Intuitive
 - Mobile
 - Flexible

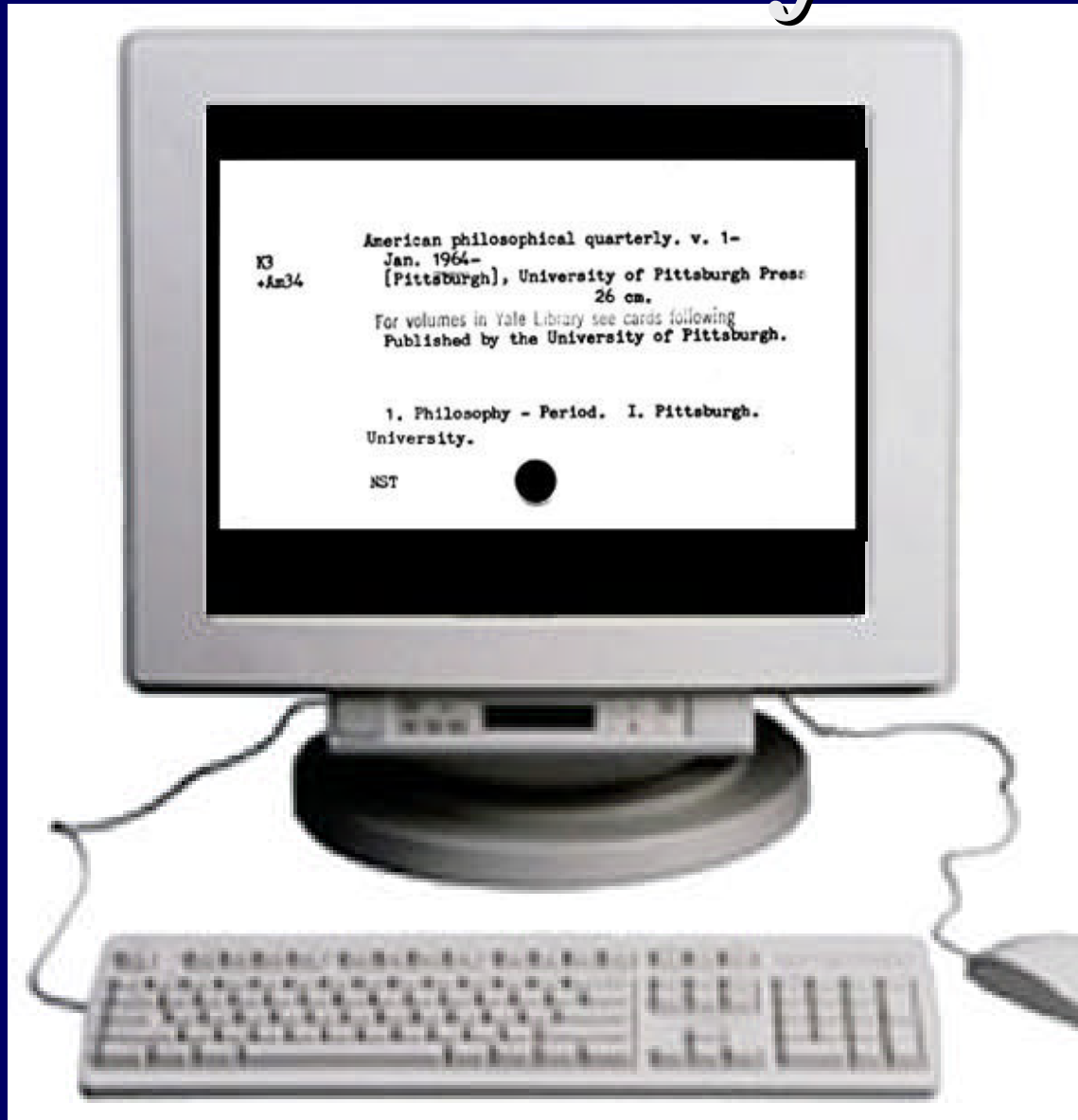
Heightened User Expectations

- Millennial Generation library users come with expectations set by their experiences of the Web
- Conventions for navigating and exploring Web-based resources well established
- Dealing with large and complex bodies of information nothing new to incoming library users.
- Sophisticated Web skills
- Low tolerance for clunky and ineffective Web sites
- Confident in their ability – reluctant to ask for help

Problems with the Status Quo

- A look and feel that may not meet the expectations of the current generation of Web-savvy users.
- The conventional library environment requires users to interact with many different interfaces, and search many different resources.
- Overly complex
- Not always intuitive
- Users have to go to different places to find different kinds of information on a given topic: Library OPAC for books, Article and E-journal locators for articles.

The best Library OPAC?



Common tools for access to local collections

- **Library OPAC (ILS module)**
- **Links to aggregators, publishers**
- **Cross linking via OpenURL**
- **Journal finding aids (Often managed by link resolver)**
- **Metasearch engines**
- **All loosely coupled**

Metasearch

- Distributed query model inherently problematic
- Not Immediate
- Relevancy ranking extremely difficult
- Lack of deep results
- Interim solution

Change underway

- Widespread dissatisfaction with most of the current OPACs. Many efforts toward next-generation catalogs and interfaces.
- Movement among libraries to break out of the current mold of library catalogs and offer new interfaces better suited to the expectations of library users.
- Decoupling of the front-end interface from the back-end library automation system.

Working toward next generation library interfaces

- **Redefinition of the library catalog**
- **More comprehensive information discovery environments**
- **Better information delivery tools**
- **More powerful search capabilities**
- **More elegant presentation**

Comprehensive Search Service

- More like OAI
- Problems of scale diminished
- Problems of cooperation persist

Web 2.0 a good start

- A more social and collaborative approach
- Web Tools and technology that foster collaboration
- Blogs, wiki, blogs, tagging, social bookmarking, user rating, user reviews

Web 2.0 supporting technologies

- Web services
- XML APIs
- AJAX (asynchronous JavaScript and XML)
- Microformats
- OpenSearch vs SRU/SRW

Replacement OPACs

- Endeca Guided Navigation
- AquaBrowser Library
- Common thread:
 - Decoupled interface
 - Mass export of catalog data
 - Alternative search engine
 - Alternative interface

Expanded discovery and delivery tools

- **Ex Libris Primo (in development)**
- **Encore from Innovative Interfaces (in development)**
- **Common threads:**
 - Decoupled interface
 - Comprehensive indexes that span multiple and diverse information resources
 - Alternative interface

Library-developed solutions

- eXtensible Catalog
- University of Rochester – River Campus Libraries
- Financial support from the Andrew W. Mellon Foundation
- <http://www.extensiblecatalog.info/>

Redefinition of library catalogs

- Traditional notions of the library catalog are being questioned
- It's no longer enough to provide a catalog limited to print resources
- Digital resources cannot be an afterthought
- Forcing users to use different interfaces depending on type of content becoming less tenable
- Libraries working toward consolidated search environments that give equal footing to digital and print resources

Interface expectations

- Millennial gen library users are well acclimated to the Web and like it.
- Used to relevancy ranking
 - The “good stuff” should be listed first
 - Users tend not to delve deep into a result list
 - Good relevancy requires a sophisticated approach, including objective matching criteria supplemented by popularity and relatedness factors.

Interface expectations (cont...)

- Very rapid response. Users have a low tolerance for slow systems
- Rich visual information: book jacket images, rating scores, etc.
- Let users drill down through the result set incrementally narrowing the field
- Faceted Browsing
 - Drill-down vs up-front Boolean or “Advanced Search”
 - gives the users clues about the number of hits in each sub topic.
- Navigational Bread crumbs
- Ratings and rankings

Appropriate organizational structures

- LCSH vs FAST
- Full MARC vs Dublin Core or MODS
- Discipline-specific thesauri or ontologies
- “tags”

Discovery

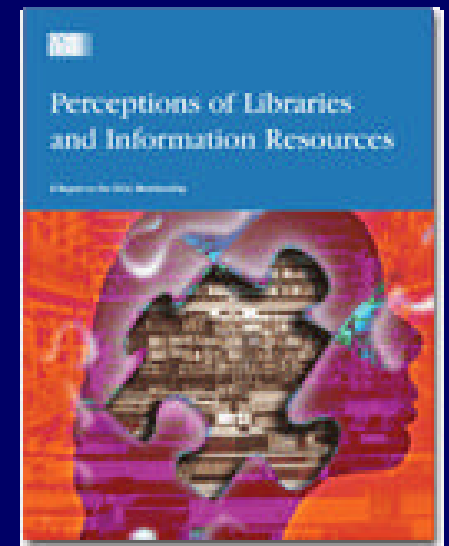
- Fundamental question:
 - How will users ever find library-provided information resources?

Troubling statistic

Where do you typically begin your search for information on a particular topic?

College Students Response:

- 89% Search engines (Google 62%)
- 2% Library Web Site (total respondents -> 1%)
- 2% Online Database
- 1% E-mail
- 1% Online News
- 1% Online bookstores
- 0% Instant Messaging / Online Chat



OCLC. Perceptions of Libraries and Information Resources (2005) p. 1-17.

New Library Search Model

- Don't count on users beginning their research with library catalogs or Web site
- Consider the library's Web site as a destination
- Make it a compelling and attractive destination that users will want to explore more.
- Web users have a low tolerance for ineffective and clunky interfaces

Library Discovery Model



Library Web Site / Catalog



Library as search Destination

Library Discovery Model

- Expose library content and services through non-library interfaces
 - Campus portals, courseware systems, e-learning environments
 - County and municipal portals and e-government
 - Other external content aggregators: RSS, etc
- Web services is the essential enabling technology for the delivery of library content and services to external applications.
- **Library community lags years behind other IT industries in adoption of SOA and Web services.**

Global arena

- Increased interrelationships with global information resources
 - Google, Yahoo!, MSN, Ask
 - OCLC worldcata.org
 - Google Scholar
 - Google Library Print
 - Wikipedia

Local collections and interfaces

- **Library-supplied information resources**
- **Traditional print collections**
 - Books, journals
 - E-Books, E-Journals

Global vs Local

- How do library collections relate to the global realm
- Will mass digitization replace local library collections?
- The global arena excels at discovery
- The local arena focuses on content delivery
- All the global content discovery tools point to locally managed content.

Connecting Local Content with Global Discovery

- Inbound / Outbound
 - Move or expose metadata as needed
 - Provide mechanisms to link or deliver resources to users
- OAI-PMH
- SRU/SRW
- Z39.50
- Microformats
- XML SiteMap Protocol
- Web Services
- UDDI, WDSL, SOAP,
- OpenUR and other deep-linking protocols

Multi-layered information discovery

- Global : Google
- Institutional / Regional : Primo
- Granular: Individual catalogs and repositories
- Broad -> Precise
- Offer both the ability to “find a few good things” and to “find exactly the right things (and all of them)”
- Appropriate avenues for both the undergraduate learner and the serious scholar.

Google vs libraries?

- Unfounded concern.
- Google bases its business on discovery
 - Most of its revenues come from adds
- Libraries specialize in delivery

Welcoming the Millennial Generation

- **Readying library collections and catalogs for the next generation will require more than a cosmetic touch-up**
- **Prompts libraries to accelerate changes already underway**

Challenges and Opportunities abound

- An exciting time for libraries
- Must exploit opportunities presented by explosive growth of digital content.
- Commercial interests and libraries have and will continue to coexist.
- Hard work is required to draw the new generation to library content and services without breaking what works well for those from previous generations.