

Services in digital libraries

Following old functions
Using new capabilities
Adding new functions

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ToC

- Traditional library functions
- Issues in translating into DL environments
- Using new digital library capabilities
- DL services: access, searching, reference, ...
- Projections



Traditionally, major functions & services in libraries*

Major functions

- **Collection**
 - selection & acquisition of information resources
 - following criteria & policies
- **Organization**
 - intellectual representation
 - processing
 - physical arrangements
- **Housing**
 - for the collection
 - for users & use

For major services

- **Access**
- **Provision of information**
- **Preservation**
- **Professional functions**

* sometimes called B&M (brick & mortar) libraries

Traditionally, major professional services

- **Access to library objects**
 - circulation
 - document delivery
 - interlibrary loan,
 - reserve
- **Access to physical facilities**
 - reading, listening, viewing facilities
 - study spaces
 - special spaces e.g. children rooms
- **Provision of information**
 - locating, obtaining items in the collection
 - intellectually, physically
 - searching
 - by users – of printed indexes, one by one...
 - OPAC, databases
 - by librarians – answering queries
 - reference
 - by librarians, directly, remotely (phone)
 - by using reference tools, mostly printed

Traditionally, major professional services ...

- **User specific services**
 - services to given populations
 - children, adults, training ...
- **Subject specific services**
 - subject bibliographies
 - pathways
 - recommender services
- **Dissemination**
 - e.g. Selective Dissemination of Information (SDI)
- **Bibliographic instruction**
- **General**
 - lecture series, exhibits, events ...

Transition

- There are libraries that are still **only physical** (B&M)
 - have only a corporeal space
- There are libraries that are **only digital**
 - have only a virtual space
- But majority of libraries now have both, a physical and a digital space
 - **hybrid libraries**
- In great many hybrid libraries the digital space is growing rapidly & out of proportion, at least economically

Transitional issues

In adapting traditional services

- What traditional library services can be adopted into a digital environment?
 - what main characteristics dictate services?
 - how to do that effectively & efficiently?

From library as a physical space



In developing new services

- What do digital environments offer that is unique?
 - how to translate that into new services?
 - how to do that effectively & efficiently?

To library as a virtual, distributed, and hybrid space

What values are fundamental no matter what space?

Digital library services

- Many are extension from traditional services
 - at start using horseless carriage model
 - to a degree constrained by requirements to build & maintain digital libraries first
- But new services & new modes of old services emerging & growing
 - becoming a major part of libraries & their economics & professional work

New characteristics of digital collections

- **COLLECTION(S):** Digital objects
 - digitized or borne digital
 - texts & other media connected
 - direct searching possibilities
- **HOUSING:**
 - some are on own servers
 - but a lot, if not most, is distributed, location could be anywhere
- **ORGANIZATION**
 - multiple organizations & representations possible & used
 - relationships, linking possible
 - could be done in the library or imported from outside
 - all much more & richer than in traditional catalogs

Example: e-collection at RUL

RUL, as many academic & research libraries, has a fast growing (and very costly) e-collection, including specific to library & information science:

Find

Library Collections

Articles ▶
Where to find general and scholarly articles on a topic

Books ▶
Search for books, videos, media, microforms, and more
About 60,000 +

Journals / Magazines / Newspapers ▶
Locate a journal or newspaper
About 100+

Indexes & Databases
Find a database on your subject search for articles.

Audio/Video ▶

Course Reserves ▶
Find items placed on reserve by your instructor for a course

Encyclopedias ▶
Encyclopedias with descriptions, organized by discipline
About 100

Dictionaries ▶
Electronic ref sources
About 5,000

Government Documents ▶
Guides to government information and publications

Dissertations & Theses ▶
Where to find dissertations & thesis completed at Rutgers and other universities

Data & Statistics ▶
Data resources by discipline
About 100+

Research Guides ▶
Browse by subject or search keywords to find guides to resources compiled by Rutgers librarians

Library and Information Science Research Quick Guide
Use this guide to get started with research in Library and Information Science

characteristics ...

- **ACCESS**
 - direct access in library
 - own or library computers
 - remote access - networks
 - part open to all - most DL now publicly accessible
 - part restricted to own community or subscription
- **PROVISION OF INFORMATION**
 - digital, synchronous, asynchronous

access examples...

- Academic, national libraries providing open collections & services; models vary
 - open access to all (e.g. [Internet Public Library](#), (now closed), [Library of Congress](#))
 - open part to all; for deep content restricted to members (e.g. [Rutgers](#), [NYPL](#))
 - mostly closed – subscription (e.g. [Early English Books Online](#))

Provision of information: searching

- OPACS for know item and subject searching
- databases for searching
 - but like print indexes have to be searched one by one
- provision of search tools for federated searching (searching a number of databases simultaneously)
 - e.g. at Rutgers through [Articles+](#) (needs NetID)
- search of reference sources

searching ...

- A number of comprehensive databases available e.g.
 - [Web of Science](#) (at RUL)
 - [Library and Information Science Abstracts](#) (at RUL)
 - [Scopus](#) (at RUL)
 - [ERIC](#) – Educational Resources Information Center (at RUL and free)
- Many cost a LOT!!!
- Libraries are offering them for end user searching
 - librarians are out of searching business in many kind of libraries
 - but they offer search tutorials, guidance, courses

from searching to full text

- Getting full text from databases:
 - some provide direct links to some of the journals
 - for others you have to go to journals or aggregators (providing access to a number of sources) e.g. [EBSCOhost](#), [ScienceDirect](#) & others at RUL (access through proxy)
 - still could be several step process
- Many public & school libraries provide access to their users to databases & other e-resources
 - they became truly hybrid
 - shifting materials costs to e-resources

Example from New Brunswick Free Public Library, NJ

Dozens of resources, including databases, are offered to library cardholders

The screenshot shows the website for the New Brunswick Free Public Library. At the top right, the address is 60 Livingston Ave, New Brunswick NJ 08901, with phone number 732.745.5108 and email nbfp@lmxac.org. The navigation menu includes Home, Catalog, Events, Links, Contact, and Search. A left sidebar contains links for About the Library, Library Services, Library Materials, Kids Page, Teen Page, and Friends of the Library, along with a 'ShareThis' button. The main content area features several promotional banners: 'iBistro Catalog' for searching books and DVDs; 'GO MOBILE!' with an image of a mobile app interface; 'Collected Memories: Community Photo Exhibit Opening Reception' on Saturday, January 10; a notice that the library will be closed on Monday, January 19 for Martin Luther King Jr. Day; and 'Makerspace' for crafting. Below these are logos for 'eLibraryNJ' (downloadable digital media), 'OneClickdigital' (classic books), and 'Research!' resources including 'JerseyClicks' and 'Gale Virtual Reference Library (GVR)'. At the bottom right, there are social media icons for Twitter, Google+, Flickr, and Instagram, and a call to action to check out the 'Spotlight Page' for more web features.

searching process...

- Much more sophisticated & with greater capabilities than print indexes searching
- Powerful capabilities available for complex searches
 - but users have difficulties and mostly do not use them
 - librarians have to learn them as well

Provision of information: reference sources

- Assembly of sources
 - e.g. [Virtual reference shelf](#) at LoC – available to all
 - Electronic Reference Sources at Rutgers – available to Rutgers members
- Subject reference
 - e.g. information on [Baseball Hall of Fame](#)

reference sources ...



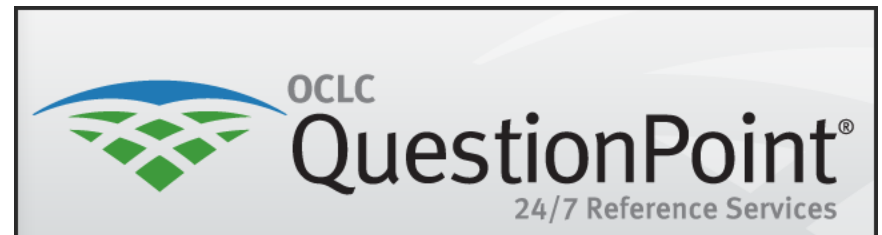
- Martindale's The Reference Desk
 - a totally, completely amazing assembly of reference sources and tools run by Jim Martindale, originally from U California, Irvine
 - includes, e.g. Martindale's Calculators On-line Center
 - “contains over "22,125" Calculators & Spreadsheets, over "4,420" Courses, Lectures, Manuals, Handbooks, & "1,000's" of Movies, Videos, Simulations & Animations”
 - You can find e.g. Party calculators
 - a demonstration of the gazillion of sources & tools found online
- **BEWARE! MARTINDALE'S IS DANGEROUS!** It is addictive. You can spend days going through it

Provision of information: reference services

- Ask a librarian – asynchronous
 - great many libraries have it (Rutgers also)
 - e.g. [U.K. People's Network](#)
- Chat reference – synchronous
 - some libraries have it as listed in [LiveRef](#) from Iowa State U
 - Library Systems and Services LLC gives a Samuel Swett Green Award for the Best Virtual Reference Transcript
 - Marie Radford (LIS) investigated it & published several articles

reference services ...

- Collaborative reference
 - Growing library service: ask at one library - answer from any library in the collaborative network
 - QuestionPoint - a global, collaborative 24/7 reference service
 - started at LoC; software by OCLC
 - also QuestionPoint community – includes member libraries around the world



dissemination

- document delivery
 - full text directly
 - through owned or licensed sources – journals, aggregators
 - from outside at a price or subsidized
- electronic reserve
 - delivered to library
 - library assembled
- interlibrary loan

examples of user specific services

- assembly & mashup of pages specific to user groups
 - children, teens ...
- weblinks - local, national ...
 - links for specific purposes
 - e.g. [taxes](#), [library jobs](#), [genealogy](#) ...
 - exploring the Internet sites
- Internet links



subject specific services

- made or assembled in a variety of subjects & media
 - RUL has, among others Library and Information Science Resources
- area coverage
 - government documents (Mich)
 - resources for school librarians (by Linda Bertland, retired school librarian)
 - legislative information (LoC)
- many local, regional history sources

subject specific services ...

- subject guides, research & reference gateways
 - extension of pathways
 - probably a most, innovative tool
- comprehensive subject coverage, e.g.
 - [NLM health information](#)

Information literacy & general

- training, tutorials
 - at RUL Article+
 - instructional materials
 - at RUL [Library Research Guides](#)
- library information
 - policies, instruction, pointers ...
- online exhibitions
 - e.g at [Smithsonian Institution](#)

Nursing guide – information literacy example at RUL



Library » Research Guides » Nursing

Nursing Tags: nursing

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About this guide

The Nursing guide has been prepared to help you, whether you are enrolled in an undergraduate or graduate program and attending on campus or online courses, to use University Libraries' services and resources successfully. With the nursing profession's integration of evidence based practice, in both the educational and the clinical environments, a nurse's effectiveness rests on the thorough understanding and application of reliable information.

The guide has been organized by program and by each component of the library research process. There are also guides on subjects of special interest to nurses. In the box below, you'll see a list of guides created for students in particular courses.

If you have any questions, the nursing librarians in the [George F. Smith Library of the Health Sciences](#)

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Program

[Undergraduate Students](#)

Graduate Students

- [From the George F. Smith Library of the Health Sciences](#)
- [From the University Libraries](#)

DNP Students

- [From the George F. Smith Library of the Health Sciences](#)
- [From the University Libraries](#)

PhD students

Nursing Librarians

Camden Campus

Paul Robeson Library (856) 2

John Maxymuk

maxymuk@camden.rutgers.edu

Busch Campus

Library of Science and Medic
445-2895

Jackie Mardikian

mardikia@rulmail.rutgers.edu (8

RBHS - New Brunswick



Services for digital libraries

- [Greenstone](#) – free digital library software
(from New Zealand)
- [Collectorz.com](#). Automatically Catalog Your Home Library Online (fee)
- other goodies can be found for free or fee

Commercial & nonprofit library services – competition?

- Given subjects, areas (some also mentioned in Diversity lecture) e.g.
 - [Bartleby](#) reference sources
 - [Ask](#) reference service
 - [Open Library](#) –digital books
 - [AcademicInfo](#) - education
 - [Web Developers Virtual Library](#)
- How much are they competing with libraries?
 - Taking over some library functions?
 - Quality? Persistency? Do users care?

D Libraries as place & space

- Pomeranz & Marchionini (2007) (in a classic article) argued that digital libraries are unable to fulfill some of the functions of the physical library as physical spaces, but are able to offer functions beyond what the physical library can offer as cognitive spaces.
- Means: Possibilities for development of new services
- Similar arguments are made constantly to this day

P & M (2007) projection

“As more digital libraries are built, and as more physical libraries offer electronic access to parts of their collection, two trends are likely to result:

the role of the library as a storage space for materials will become decreasingly important;

and the role of the library as a space for users, for individual and collaborative work, and as a space for social activity, will become increasingly important.”

New DL services: Who?

- Will they be developed by
 - librarians?
 - computer scientists?
 - commercial outfits?
 - user groups?
- All are now in the play
- Need cooperation among various groups

Conclusions

- DL services provide for
 - great challenges, but also
 - great opportunities to innovate
- Exploit characteristics of digital world for services
 - but link to user needs and characteristics
- Economics play a critical role
 - \$\$\$\$\$\$ vs. possible services
- Competition growing

