Libraries in Transition
Changing Our Culture, Keeping Our Values

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Charleston, SC
Outline

- Look at primary challenges
- Conduct an assessment of change

Nature of change

- Identify values at risk
- Suggest next steps
Uphold Values Within Constraints

- **Values**
  - Service
  - Stewardship
  - Privacy
  - Intellectual freedom
  - Equitable access
  - Literacy

- **Constraints**
  - Users
  - Mission
  - Standards
  - Laws of humankind
  - Laws of nature
  - Economics
Understand How & Why
Libraries Are Changing

- Discover what users need, do, want, & prefer
- Allocate human & financial resources
- Balance traditional & digital initiatives
- Manage physical & virtual
- Manage change

Parse the issues
Make tough choices
Understand How & Why

Public Policy is Changing

- Uncover the motivations & implications of existing & proposed laws & licenses
- Identify incentives & strategies to balance private interest & public good
- Allocate human & financial resources
- Manage change

Parse the issues
Make tough choices
Avatars of the Word

“The challenge for us today . . . is to balance old models with new modes of behavior that exploit the possibilities of the new environment effectively without disorienting us so completely that we forget who we are.”

James J. O’Donnell
University of Pennsylvania
1998
Changes Within Libraries

- Use & users
- Work & workflow
- Librarians & staff
- Budget
- Physical & virtual space
Changes in Library Use & Users

- Gate counts
- Circulation (1%)
- In-house use
- Reference (1%)

- E-resource use
- ILL borrow (8%)
- ILL loan (4%)
- Instruction (4%)

Aggregate trends, but no Everyman library
Mission Influences Change

- Shapes expectations of administrators
- Shapes immediate environment
- Shapes use & users
- Shapes measures

Become a predominantly digital library
Digital Measures

- 99% ILL requests submitted electronically
- 31% ILL borrowed items arrive digitally
- 65% reference Q answered with e-resources
- 16% reference Q submitted electronically
- 95% index use is digital
- 46% of library visits are virtual
- 34% of reserve use is digital
- 23% of reserve items are digital
- 50% journals have digital component
- 5% all resources are digital full text
Resource Use Per FTE

- CIRCULATION
- ILL
- OPAC
- DATABASES
Remote Use of E-Resources

Not much data available
Users Want Comfort & Convenience

- 24/7 access to resources – preferably remote
- More full-text e-resources – but security of print
- State-of-the-art technology
- Food & drink
- Self-reliance
- Speed

McDonaldization
Issues with Use & Users

- We need to know what other information users use, when, why, & what they do with information once they find it

- Keeping pace with change
  - Use & users are changing faster than our knowledge of them

- Impact on time & $$
Changes in Work & Workflow

- Technology selection, deployment, and maintenance
- E-resource licensing & product trials
- E-resource creation & permissions
- E-service development & provision
- Marketing & fund raising
- Assessment

Acquisitions
Administration
Archives
Cataloging
Circulation
Digital Library Initiatives
Reference
Serials
Systems
Assessment

- Traditional library inputs & outputs
- Digital library inputs & outputs
- Hybrid library performance measures
- Cost effectiveness & benefits
- Outcomes & impacts
- Satisfaction & quality
- User & usability studies
Usability

- Articulate purpose
- Commit & plan
- Design instruments
- Recruit subjects
- Get IRB approval
- Handle logistics
- Conduct
- Analyze
- Interpret
- Present
- Apply
- Follow-up

More people involved
More challenging the results
The longer it takes
The less likely results will be applied
Digitization

- Identify materials
- Acquire permissions
- Prepare materials
- Scan
- OCR
- Verify quality
- Capture metadata
- Link to catalog

- Return materials
- Manage process
- Index

Standards
Multimedia
Restrictions
Issues with Work & Workflow

- How to train
- Whom to train
- How to organize
- How to manage change
- How to assess changes
- How to reduce costs
- Impact on time & $$
Changes in Librarian Roles

- Advertisers
- Authors
- Collaborators
- Data analysts
- Fund raisers
- Interface designers
- Mentors

In addition to traditional duties

- Politicians
- Project managers
- Recruiters
- Researchers
- Teachers
- Technicians
New Staff Positions

- Data analysts
- Development & HR officers
- Efficiency experts
- Interface designers
- Programmers
- Researchers
- Scanner operators
- System Managers
- Technicians
Issues with Staffing

- Overload
- Culture clash
- Recruiting & retaining diversity & excellence
- How to assess changing roles & responsibilities
- Impact on time & $$
Changes in Space Planning

- If collection of 1 million volumes increases 2%
  - 20,000 volumes = 2,000+ linear feet of shelving
  - $400,000 to catalog, circulate, shelve & re-shelve

*Planning Academic Library Buildings, 3rd edition.*
Chicago, IL: American Library Association.
Comparative Economics

- Cost of storage & circulation per volume
  - $20 to $40 on library shelf
  - $5 to $8 in off-site storage
  - $9 to $3 for digital storage

- Labor & storage costs to digitize volumes
  - $25-$40 per dis-bounded volume ($0.10 page)
  - $90-$140 per bound volume ($0.30 page)
Virtual & Physical Space

- For an investment of $2,500 - $17,500 you can digitize 100-125 volumes & save 10 square feet of floor space

ASSUMPTION

- One standard single-faced shelving unit in open stacks, books shelved by subject, & aisle for handicapped access
Other Assumptions, Other Costs

- You have the space for the scanning shop
- You have the equipment & trained staff to scan, OCR, index, manage, & migrate the materials
- You have the system to deliver the materials, & your users know how to use it
- You have the human & financial resources to seek & pay for copyright permission
- You can support additional printing
## Success of Copyright Permission

<table>
<thead>
<tr>
<th></th>
<th>Articles</th>
<th>Books</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total items</strong></td>
<td>96</td>
<td>337</td>
</tr>
<tr>
<td>1. Copyright protected</td>
<td>70%</td>
<td>94%</td>
</tr>
<tr>
<td>2. Publishers contacted</td>
<td>70%</td>
<td>88%</td>
</tr>
<tr>
<td>3. Publishers responded</td>
<td>45%</td>
<td>51%</td>
</tr>
<tr>
<td><strong>Days to respond</strong></td>
<td>30</td>
<td>101-124</td>
</tr>
<tr>
<td><strong>Permission granted</strong></td>
<td><strong>90%</strong> (28%)</td>
<td><strong>43%</strong> (22%)</td>
</tr>
</tbody>
</table>

Wayne State Carnegie Mellon
Cost of Copyright Permission

<table>
<thead>
<tr>
<th></th>
<th>1,000 articles for reserves</th>
<th>7,307 advertisements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transaction</td>
<td>$24,500</td>
<td>$10,450</td>
</tr>
<tr>
<td>Permissions</td>
<td>$26,000</td>
<td>??</td>
</tr>
<tr>
<td>TOTAL COST</td>
<td>$50,500</td>
<td>??</td>
</tr>
</tbody>
</table>

Cost of getting permission to digitize “commercially fallow books is likely to be hundreds of times greater than the cost of digitization”
# The Partial Cost of Quality

<table>
<thead>
<tr>
<th>Service</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digitize 100-125 volumes</td>
<td>$2,500</td>
<td>$17,500</td>
</tr>
<tr>
<td>Offsite storage</td>
<td>$500</td>
<td>$1,000</td>
</tr>
<tr>
<td>Print 3,000 - 10,000 pages</td>
<td>$60</td>
<td>$200</td>
</tr>
<tr>
<td>Copyright (50x)</td>
<td>$125,000</td>
<td>$875,000</td>
</tr>
<tr>
<td><strong>Subtotal investment</strong></td>
<td>$128,060</td>
<td>$893,700</td>
</tr>
<tr>
<td><strong>Total Saved</strong></td>
<td>$2,000</td>
<td>$5,000</td>
</tr>
<tr>
<td><strong>Expense</strong></td>
<td>$126,060</td>
<td>$893,700</td>
</tr>
</tbody>
</table>

*Not including cost of equipment or system*
# Really Save 10 Square Feet?

<table>
<thead>
<tr>
<th>Equipment / Square footage</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer or laptop space at counter height</td>
<td>20</td>
</tr>
<tr>
<td><strong>Computer at sit-down height &amp; take notes</strong></td>
<td>35</td>
</tr>
<tr>
<td>Computer at sit-down height, no notes</td>
<td>25</td>
</tr>
<tr>
<td>Laptop sit-down space &amp; take notes</td>
<td>25</td>
</tr>
<tr>
<td><strong>Printer</strong></td>
<td>10</td>
</tr>
</tbody>
</table>

A table for 4 occupies 23-28 square feet
Issues with Collection Space

- How to accommodate growth
  - What to weed
  - What to digitize
  - What to keep in print

- How to reduce costs
- Impact on time & $$
Changes in the Budget

- Average annual budget increases:
  - materials (7%), salaries (5%), operating (4%)

Increased expenditures
- Copyright permissions
- Dual operations
- Marketing & fund raising
- Printing
- R&D
- Technology
- Training & development

Decreased revenue
- Photocopying
- Fines & fees
Digital Library Costs

- Spending increasing % of the budget on e-resources, technical staff, & technology

- Digital library expenditures
  - 40% Content licensing
  - 7% Content creation
  - 23% Equipment & infrastructure
  - 18% Staff
  - 12% Other
Issues with the Budget

- It’s inadequate to meet needs & expectations
- Impact on time & $$
  - Lobby for new allocations
  - Conduct a census on reallocations
  - Write proposals & manage grants
  - Cultivate prospects & manage gifts

Sustainability

Many libraries don’t have a permanently funded replacement cycle for equipment
Changes Outside of Libraries

- Landscape
- Laws & licensing
- Literacy
More Resources Available

For every 100 volumes published in 1950, 25,600 will be published in 2002.
Purchasing Fewer Resources

- Libraries are spending more but acquiring less
- Decreased new resources per student

Reduced service & convenience to users
Inequality of Available Content

ARL Report December 2000 E-Journals

Confusion & reduced service & convenience to users
Inequality of Internet Access

ALA Cognotes
January 2001

Aggregate trends, but local context …
Network Connectivity

Campus population

Campus wireless enabled 2000
Computer Ownership

Increased remote use

New collections & services

Number of public computers

Work & workflow

Space Budget

Budget

Own Plan

Not Plan


Own plan

Increased remote use

New collections & services

Number of public computers

Work & workflow

Space Budget

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Not Plan


Own plan
Inequality of Accessibility

30% of Americans have impaired sight, sound, or mobility.

Frustration & reduced service & convenience to users

Copyright issues
Inequality of Usability

35% is not white
24% is Asian

Frustration & reduced service & convenience to users
Competition

- Patents, standards, specifications, drawings
- Trade & consumer information
- Market research & services
- Government information
- Financial information
- Medical information
- Online bookstores
- Ask-A services
- Courseware
- Listservs
- Course management software
- News
- Accountability for learning outcomes
New Public Policy

- New business models
  - Licensed access, not purchased ownership
  - Subscription & pay-per-use
- License defines allowable use
- Technology enforces allowable use
- No commitment to continued access, preservation, public domain, or public good
Digital Millennium Copyright Act (DMCA)

- Gives legal status to DRM software
  - Illegal to circumvent, remove, or alter technological protections against illegal access
  - Illegal to manufacture, sell, or distribute code-cracking devices that enable illegal copying
Uniform Computer Information Transaction Act (UCITA)

- Gives legal status to uniform contract rules
- Rules currently set forth in product licenses
  - Shrink-wrapped
  - Click-wrapped
  - Non-negotiable

In the past, non-negotiated licenses were unenforceable by law
Security Systems Standards & Certification Act (SSSCA)

- All future technologies must include DRM
  - Software; PCs; peripherals; GPS receivers; CD, DVD & MP3 players; cellular phones; digital cameras, watches & TiVos; game consoles
- Copyright owners will dictate terms based on criteria provided by Congress

Who will protect public access?
Licensing & DRM Software

- Prevent works from entering the public domain
- Eliminate rights of first purchase & fair use
- Prohibit reverse engineering
- Dictate venue for litigation
- Restrict period of use
- Build in obsolescence
- End equitable access
- Invade user privacy
- Enable censorship

License trumps copyright
Law Suits & ISP Practices

- Bidder’s Edge – stop gathering public facts
- Slashdot – remove criticism
- Skylarov – don’t convert Adobe e-book to PDF
- Programmer – don’t enable DVDs to run on Linux
- Napster – contributory & vicarious infringement
- ISPs – invade privacy, restrict behavior, define public space, block black-listed email
Public Outcry!

- Using technology, licensing, & litigation to
  - Protect sales & profits
  - Embed political choices in hardware & software
  - Control how, where, & who can do what
  - Erode free speech, intellectual freedom, public access, competition, & innovation
  - Culturally engineer the Internet into a surveillance-monitored, pay-per-use vending machine that vends hegemony
Literacy

- Definition & distribution are constrained by
  - Political ideology
  - Technological possibility

- Separated from politics, literacy is the INTERNALIZATION of the possibilities afforded by a particular technology

Changes perception, cognition, ontology
Gives rise to new genres & way of life
The Nature of Change

- Change is constant
- The speed of change is increasing

By 2015, technological change will occur at an exponential rate
Technological Change

- Nano technology
- Automatic translation & analysis
- Holographic tools & user interfaces
- Large population who can’t read or write
- Digital transformation – not preservation – of our global cultural & intellectual heritage

New space configurations
New systems
New roles & competencies
New collections & services
Change Is a Process

CURRENT
Beliefs
Behaviors
Assumptions

You will pay for change
Secure commitment or suffer the consequences
Change Is Manageable

- Resistance is natural
- Resistance is futile
  - People must be willing & able to change
  - They need incentive & an articulated vision that connects with their aspirations
- Key is resilience

Positive
Focused
Flexible
Tolerant
Engaged
Values at Risk

- Service quality
- Literacy as we know it
- Equitable access
- Intellectual freedom
- Privacy
- Stewardship

Political changes threaten public & private life
Libraries Individually

- Eliminate unnecessary activities
- Organize key processes as core activities
- Develop leaders & managers
- Develop resilience
- Explore options
Libraries Collectively

- Educate users
  - Hidden agendas
  - Unforeseen consequences
  - “Free” & “freedom”
- Refuse to sacrifice
  - Identify incentives & strategies to balance private interest & public good
  - Negotiate viable licenses

Create a market force to preserve our values
Avatars of the Word

“"If the traditional librarian has been conceived as a figure at home in the discreet silences & cautious dealings of a Henry James novel, now perhaps the right model will be found in … the Star Wars films … & the Jedi knight.””

Thank You

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