A Geographical Representation of WorldCat Resources: A Decision-Making Tool for Acquisitions and Collection Management

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OCLC
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Materials Represented in WorldCat

- WorldCat
  - More than 75 million bibliographic records
    - Publication information
      - Place
    - Subject information
    - Language of item
  - More than a billion holdings
  - More than 10,000 member libraries contributing
Origin of Materials Represented in WorldCat

- US: 34%
- Rest of World: 40%
- UK: 9%
- Canada: 3%
- Unknown: 14%
OCLC WorldMap™: Decision-making Resource

- Collection management
  - Cooperative collection development
  - Comparative collection analysis
  - Collection assessment
  - Mass digitization
  - Off-site storage
  - Preservation
- Comparative library data
  - Funding
  - Assess cultural differences
  - Provide benchmarks
  - Authoritative vetted reference resource
OCLC WorldMap™: Objectives

- Geographically represent library data from UNESCO, ARL, and NCES
  - Number of libraries
  - Amount of library expenditures
  - Number of volumes and titles
  - Number of librarians
  - Number of users
OCLC WorldMap™: Objectives

- Research prototype
  - Test geographical representation of WorldCat
    - Titles and holdings by country of publication
  - Support data mining research area
    - Visually display mined data to ease review and analysis
      - Internal use
      - Sales and marketing
      - External use
        - Library collection assessment and comparison
  - Complement the AAU/ARL Global Resources Network project
    - Project of the Council on Library and Information Resources (CLIR)
OCLC WorldMap™: Data Mining

- Decisions
  - Independent vs. dependent
  - Administrative units vs. service points
  - Inconsistent data categories
  - Unknown date for source data
- Challenges
  - Absence
  - Currency
  - Accuracy
    - Manual tabulation
OCLC WorldMap™: Technology

- First implemented SVG
  - Open standard maintained by W3C
  - Simple XML file
  - Young technology
  - Browser support limited
  - Requires plug-in
- Converted to Flash
  - Browser compatibility
  - Plug-in compatibility (if a plug-in was installed!)
- For a detailed comparison of SVG and Flash, see: http://www.carto.net/papers/svg/comparison_flash_svg/
   http://www.liboro.ac.uk/departments/dils/listus/list03/list03.html (accessed November 2, 2006).
Academic Libraries: 2000

E.D. Tabs

U.S. Department of Education
Institute of Education Sciences
NCES 2004-317
Add a continent, country, state, or province from the alphabetical list.

Select a library type to generate a table comparing library data for the place/s added above.

<table>
<thead>
<tr>
<th>Library Type</th>
<th>Generate Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td></td>
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OCLC WorldMap

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<tr>
<td>South Carolina</td>
<td>$60,311,451</td>
<td>360</td>
<td>81</td>
<td>N/A</td>
<td>10,466,710</td>
</tr>
<tr>
<td>Ohio</td>
<td>$174,004,560</td>
<td>812</td>
<td>143</td>
<td>N/A</td>
<td>38,218,718</td>
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<tr>
<td>United States of America</td>
<td>$5,025,343,128</td>
<td>25,152</td>
<td>3,527</td>
<td>7,841,610</td>
<td>91,354,999</td>
</tr>
<tr>
<td>Germany</td>
<td>€435,321,900</td>
<td>3,697</td>
<td>295</td>
<td>2,036,020</td>
<td>143,911,373</td>
</tr>
</tbody>
</table>
Some aspects of “Global WorldCat” …

Content Languages: 476
43% of WC non-English
Top 5 non-English:
German: 4.5 million
French: 4.2 million
Spanish: 2.9 million
Dutch: 2.1 million
Chinese: 1.6 million

Materials w/non-US origins:
35.3 million (52%)
Top 5:
UK: 6.1 million
Germany: 4.0 million
France: 2.9 million
Netherlands: 2.2 million
Canada: 2.1 million

Non-English Metadata Language:
9.3 million (20 languages)
Top 5:
Dutch: 4.1 million
Japanese: 0.7 million
French: 1.4 million
Finnish: 0.7 million
German: 1.0 million
Possible Future Enhancements

- Subject information “aboutness”
- Language of item
  - Content language
  - Metadata language
- Holdings by country of library
- Other?
Presentation will be available at
http://www.oclc.org/research/presentations/default.htm

Prototypes available at
http://www.oclc.org/research/researchworks/default.htm
Questions and Discussion

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