Harnessing Electronic Resource Usage Data for Effective Policy Making

Virginia Kinman
Longwood University
Virginia Assessment Group 2009 Fall Conference
Nov. 17, 2009, Lynchburg, VA
Academic libraries are becoming “collaborators in a multimedia-rich, user-empowered, disintermediated free-for-all where their value will be proven only by demonstrably improving outcomes in learning, teaching, and research.”

Outline

- What are e-metrics?
- Sample e-metrics
- Sparklines
- Macro trend analysis
- Application

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What are e-metrics?

E-metrics may be loosely defined as any effort to measure electronic and networked resources.


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COUNTER Code of Practice

Counting Online Usage of Networked Electronic Resources

- Journals and Databases
  - Release 1 (January 2003)
  - Release 2 (April 2005)
  - Release 3 (August 2008)
- Books and Reference Works
  - Release 1 (March 2006)

Source: http://www.projectcounter.org

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COUNTER Metrics

E-metrics will only give us a general indicator of use, not actual usage.

4 basic COUNTER usage elements:

- Sessions
- Searches
- Turnaways
- Full-Text Items

Source: http://www.projectcounter.org
Longwood University

- Master’s I
- State supported
- 4,400+ FTE
- Growing graduate and online programs

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Basic E-Metrics

Database Searches

Database Sessions

Full-Text Article Downloads

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Basic E-Metrics Per FTE

**Database Searches per FTE**

- FY 04-05: 75
- FY 05-06: 125
- FY 06-07: 150
- FY 07-08: 150
- FY 08-09: 150

**Database Sessions per FTE**

- FY 04-05: 50
- FY 05-06: 75
- FY 06-07: 75
- FY 07-08: 75
- FY 08-09: 75

**Full-Text Article Downloads per FTE**

- FY 04-05: 25
- FY 05-06: 50
- FY 06-07: 75
- FY 07-08: 125
- FY 08-09: 125

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Basic E-Metrics Ratios

Searches per Session

<table>
<thead>
<tr>
<th>FY 04-05</th>
<th>FY 05-06</th>
<th>FY 06-07</th>
<th>FY 07-08</th>
<th>FY 08-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>2.0</td>
<td>1.0</td>
<td>2.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

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Macro Trend Analysis

As early as 2002, Shim and McClure urged libraries to “consider the planning and evaluation of library networked resources as part of larger organizational planning and evaluation activities.”

Sparklines

Columnar Sparklines show trends over time by identifying the high and low values in a common continuum.

How do you create Sparklines?

<table>
<thead>
<tr>
<th></th>
<th>Fall 2003</th>
<th>Fall 2004</th>
<th>Fall 2005</th>
<th>Fall 2006</th>
<th>Fall 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directional Questions</td>
<td>2,184</td>
<td>1,493</td>
<td>725</td>
<td>395</td>
<td>669</td>
</tr>
<tr>
<td>Reference Questions</td>
<td>1,561</td>
<td>2,458</td>
<td>3,178</td>
<td>1,640</td>
<td>2,318</td>
</tr>
<tr>
<td>Computer Questions</td>
<td>0</td>
<td>2,230</td>
<td>2,750</td>
<td>2,156</td>
<td>3,253</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3,745</td>
<td>6,181</td>
<td>6,653</td>
<td>4,191</td>
<td>6,240</td>
</tr>
</tbody>
</table>

Each year is a percentage of the largest value in the range.

<table>
<thead>
<tr>
<th></th>
<th>03</th>
<th>04</th>
<th>05</th>
<th>06</th>
<th>07</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td></td>
<td>68%</td>
<td>33%</td>
<td>18%</td>
<td>31%</td>
</tr>
<tr>
<td>49%</td>
<td></td>
<td>77%</td>
<td>100%</td>
<td>52%</td>
<td>73%</td>
</tr>
<tr>
<td>0%</td>
<td></td>
<td>69%</td>
<td>85%</td>
<td>66%</td>
<td>100%</td>
</tr>
<tr>
<td>56%</td>
<td></td>
<td>93%</td>
<td>100%</td>
<td>63%</td>
<td>94%</td>
</tr>
</tbody>
</table>

=B2/LARGE($B2:$F2,1)   =C2/LARGE($B2:$F2,1)   etc.

Use a different, consistent color for each year.

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## Circulation Activity by Type (Selected)

<table>
<thead>
<tr>
<th></th>
<th>FY 03-04</th>
<th>FY 04-05</th>
<th>FY 05-06</th>
<th>FY 06-07</th>
<th>FY 07-08</th>
<th>FY 08-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audiovisual Materials</td>
<td>76,533</td>
<td>140,465</td>
<td>144,279</td>
<td>136,985</td>
<td>139,196</td>
<td>141,046</td>
</tr>
<tr>
<td>Books</td>
<td>69,059</td>
<td>105,375</td>
<td>106,851</td>
<td>102,893</td>
<td>97,933</td>
<td>92,267</td>
</tr>
<tr>
<td>Print Reserves</td>
<td>15,073</td>
<td>17,310</td>
<td>12,547</td>
<td>11,555</td>
<td>16,830</td>
<td>15,958</td>
</tr>
<tr>
<td>Electronic Reserves</td>
<td>0</td>
<td>5,381</td>
<td>7,087</td>
<td>8,207</td>
<td>8,624</td>
<td>6,696</td>
</tr>
<tr>
<td>Equipment/Media Lab</td>
<td>0</td>
<td>1,224</td>
<td>3,491</td>
<td>7,504</td>
<td>17,153</td>
<td>21,589</td>
</tr>
</tbody>
</table>

**Total Circulation**

**Audiovisuals**

**Books Circulation**

**Print Reserves**

**Electronic Reserves**

**Equipment/Media Lab**

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Sparklines

**Snapshot 2**

**Information Center Usage Counts**

<table>
<thead>
<tr>
<th></th>
<th>FY 03-04</th>
<th>FY 04-05</th>
<th>FY 05-06</th>
<th>FY 06-07</th>
<th>FY 07-08</th>
<th>FY 08-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Info Center Computer Count</td>
<td>N/A</td>
<td>48,453</td>
<td>57,467</td>
<td>50,980</td>
<td>62,411</td>
<td>80,601</td>
</tr>
<tr>
<td>Info Center Other Count</td>
<td>N/A</td>
<td>0</td>
<td>10,488</td>
<td>16,820</td>
<td>15,881</td>
<td>15,171</td>
</tr>
<tr>
<td>TOTAL</td>
<td>N/A</td>
<td>48,453</td>
<td>67,955</td>
<td>67,800</td>
<td>78,283</td>
<td>95,725</td>
</tr>
</tbody>
</table>

**Library Gate Entry Count and Circulation Activity**

<table>
<thead>
<tr>
<th></th>
<th>FY 03-04</th>
<th>FY 04-05</th>
<th>FY 05-06</th>
<th>FY 06-07</th>
<th>FY 07-08</th>
<th>FY 08-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gate Count</td>
<td>162,747</td>
<td>289,788</td>
<td>316,939</td>
<td>344,572</td>
<td>380,684</td>
<td>396,491</td>
</tr>
<tr>
<td>Circulation Activity</td>
<td>172,825</td>
<td>281,610</td>
<td>267,376</td>
<td>261,120</td>
<td>269,793</td>
<td>271,704</td>
</tr>
</tbody>
</table>

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### Books and Audiovisuals

<table>
<thead>
<tr>
<th></th>
<th>FY 02-03</th>
<th>FY 03-04</th>
<th>FY 04-05</th>
<th>FY 05-06</th>
<th>FY 06-07</th>
<th>FY 07-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volumes Held*</td>
<td>319,336</td>
<td>325,290</td>
<td>331,538</td>
<td>332,647</td>
<td>330,793</td>
<td>344,567</td>
</tr>
<tr>
<td>Audiovisual Items Held</td>
<td>15,627</td>
<td>18,270</td>
<td>17,984</td>
<td>19,134</td>
<td>20,265</td>
<td>20,799</td>
</tr>
<tr>
<td>Books Purchased</td>
<td>7,536</td>
<td>5,793</td>
<td>5,210</td>
<td>3,221</td>
<td>2,434</td>
<td>3,042</td>
</tr>
<tr>
<td>Electronic Books Held</td>
<td>0</td>
<td>0</td>
<td>32</td>
<td>11,034</td>
<td>12,646</td>
<td>12,896</td>
</tr>
</tbody>
</table>

*Bound books and serials; does not include e-books

All data from ACRL annual survey

### Journals

<table>
<thead>
<tr>
<th></th>
<th>FY 02-03</th>
<th>FY 03-04</th>
<th>FY 04-05</th>
<th>FY 05-06</th>
<th>FY 06-07</th>
<th>FY 07-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serials Purchased*</td>
<td>2,046</td>
<td>2,000</td>
<td>1,680</td>
<td>1,604</td>
<td>2,500</td>
<td>10,271</td>
</tr>
<tr>
<td>Total Electronic Journals</td>
<td>N/A</td>
<td>11,905</td>
<td>16,496</td>
<td>22,462</td>
<td>22,646</td>
<td>23,563</td>
</tr>
<tr>
<td>Electronic Journals Purchased**</td>
<td>N/A</td>
<td>6,629</td>
<td>6,998</td>
<td>9,555</td>
<td>14,258</td>
<td>9,558</td>
</tr>
<tr>
<td>Electronic Journals Not Purchased***</td>
<td>N/A</td>
<td>5,276</td>
<td>9,498</td>
<td>12,907</td>
<td>7,876</td>
<td>14,005</td>
</tr>
</tbody>
</table>

*Includes standing orders; estimate for FY03-04 (figured differently in 06-07 and 07-08 per ACRL change)

**Unique e-journal titles from subscriptions and databases (figured differently in 06-07 per ACRL change)

***Unique e-journal titles from VIVA and open access sources (figured differently in 06-07 per ACRL change)

All data from ACRL annual survey

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Did the Information Commons opened in Fall 2004 impact the use of library services and collections?

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Macro Trends Services

Do other patterns or discrepancies raise questions for further assessment?

- Instruction Sessions
- Reference Questions
- Computer Questions
- ILL Borrowing
- Graduate FTE
- OpenURL Searches

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Macro Trends Collections

How is use of the collection, both print and online, changing?

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“The biggest challenge in maximizing the utility of e-serial usage data may be simply recognizing new opportunities for using this data.”

Questions?

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Janet D. Greenwood Library
Longwood University

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