Analyzing Data in LibStats to Reveal Trends in Academic Library Usage

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Introduction

In recent years, academic libraries have been increasingly challenged to offer new, more sophisticated ways to engage their community of users that keep pace with rapid technological development. Research shows that faculty, students, and other academic users place increasing value on digital scholarship and may not always view the academic library as the best gateway to access such information. At the same time, academic libraries have continued to rise to the challenge presented by rapid technological change by offering new services and offering creative approaches in reference services in order to reach library patrons. Reference staff in particular have been challenged to define, develop and implement new methods for reaching those who seek research assistance as traditional measures of reference service have revealed declining activities at ‘traditional’ settings, such as a ‘reference desk.’

While many different strategies are being employed today, numerous academic libraries still maintain vital and active service desks, or at least a semblance of such reference outposts, that continue to provide services to users. These services more often than not include a combination of ways to interact with patrons: in-person, telephone, IM, email, and text message, for example. At the University of Kansas, statistics have been collected via the open source software known as LibStats since 2007 at the two largest campus libraries: Anschutz and Watson Libraries, which together contain the central collections in the sciences, humanities, and social sciences.

Methodology

Data analysis comprised of several components, including the following elements:

• Time frame: 2008-2010
• Number of questions collected via LibStats: 27,000
• Number of questions analyzed from the sample: 4,200 (14-15%) of total
• Format of questions: In-person, via IM or telephone. All questions fielded by Watson and Anschutz Library reference staff

A subject taxonomy was created to analyze questions:

• Taxonomy based on subject headings used to organize databases into broad categories on the KU Libraries site (www.lib.ku.edu)
• Used additional taxonomy headings corresponding to professional schools within the University, including Business, Education, Engineering, Journalism, Law and Social Welfare.
• Headings were assigned to questions with content that matched particular subject headings.
• Some subheadings were created for broad subject categories including Humanities, Languages and Literature, Science, and Social Sciences in order to refine results.
• Heading ‘General/Reference’ was used to tag general, non-specific questions about the availability of particular items, general reference questions, or other non-specific kinds of questions.
• The tag ‘Instruction’ was created and applied to those questions, regardless of content, that provided a ‘teaching moment’ for reference staff. Such questions generally included phrases like ‘How do I...’ or ‘How can I...’ search a subject database, for example. That is, they required more instructional techniques to be applied fully to respond to the question.

Patterns of usage were noted:

• Usage patterns were examined to discover which patron types most frequently used reference services: faculty/staff, students, other, and unsure.
• The group ‘ Unsure’ was applied when the patron type was not clear. The category ‘Unsure’ is different than the category ‘Other,’ which we used to describe known non-university patrons, such as members of the community.
• Cycles of activity were reviewed:
• Levels of reference activity were noted based on times of the day and days of the week during each semester in order to discover patterns of significant reference activity.
• Locations were noted (in this case, either Watson or Anschutz Libraries) as well as the mode of communications used by patrons (in-person, telephone, or IM) and which has the greatest volume over time.

Who? To discover patterns of usage among patrons at the reference desks in Anschutz and Watson Libraries

<table>
<thead>
<tr>
<th>Users</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergrad</td>
<td>3663</td>
<td>3687</td>
<td>4245</td>
</tr>
<tr>
<td>Unsure</td>
<td>2826</td>
<td>3711</td>
<td>4517</td>
</tr>
<tr>
<td>Graduate</td>
<td>534</td>
<td>535</td>
<td>640</td>
</tr>
<tr>
<td>Other</td>
<td>546</td>
<td>431</td>
<td>555</td>
</tr>
<tr>
<td>Fac/Staff</td>
<td>459</td>
<td>441</td>
<td>461</td>
</tr>
<tr>
<td>Grand Total</td>
<td>8028</td>
<td>8805</td>
<td>10418</td>
</tr>
</tbody>
</table>

Why? To help KU Libraries answer increasing complex questions regarding how faculty and staff time should best be reallocated within reference services

This research was undertaken to learn several things about KU Libraries reference services, including the following:

• Greatest areas of subject inquiries at general reference desks
• Nature of the complexity of questions being posed to us as reference specialists
• Determine which resources are being utilized to answer questions
• Insight into staffing patterns at general reference desks, and how to best delegate faculty and staff time within reference services
• Need to further implement standards of training for reference staff based on response to questions

Findings

• KU Libraries’ reference statistics from 2008-2010 are trending up (in contrast to ARL)
• In-person reference questions up
  • Watson had 8% increase
  • Anschutz had 61% increase (Learning Studio)
• Instant messaging (IM) trending up overall since 2008
• Telephone inquiries holding static
• Undergraduates largest group of users
• Largest categories are General/Reference & Technology, followed by Humanities, Science, & Social Sciences
• Fall Semesters are busier than Spring
  • Busiest months are September, October, & November
• Watson Library (Humanities & Soc. Sci.) highest use
• Data being used to inform staffing and training
• Further refinement of LibStats to include subject tagging

What? To discover the kinds of research inquiries

What discipline/subject categories are being researched?

When? To discover the times when research assistance is being sought

Where? To discover if locations are experiencing significantly different volumes, modes of communication

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