Introduction to Libstats

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Standard data format?

- RUSA defines a reference transaction
- ACRL, etc. want to know our stats
- Need to compare ourselves to peers

- Speaks to the need for a standard
  - But, “we’re all unique”
  - Other aspects of library work do have standards
Standard format benefits

• Meaningful comparison between institutions
  – Not just random numbers, but meaningful numbers
  – Support for staffing and marketing efforts
• We’re more alike than different, so we should be able to articulate what we do clearly
Choosing Web applications

- Choices abound
- If you have some service or feature in mind, someone has probably done it
- Main question: commercial or open source?
Commercial software

• Cons
  – Costs money
  – Recurring costs
  – Vendor must serve many needs
  – Does not allow much tweaking

• Pros
  – Generally requires minimal tweaking
  – Vendor provides support
  – This can also be a con!
Open source software

- **Pros**
  - No purchase costs – just download
  - Access to code, change it to fit
  - If it doesn’t work, getting rid of it isn’t painful

- **Cons**
  - No dedicated support – just a community
  - Bugs/Issues

- With a little work, however, OSS can be an excellent choice
Reasonable expectations

• The software will work, but will require patience
• Support from the community may be good, but requires participation
• If no programmers available, you’ll have to use it as is
• Cost is minimal, so switching solutions/platforms is likely
Reasonable expectations

• **Interesting discussion** of OSS for libraries
  - “what should be an under 15 minute install could drag out for days if the person doing the install is relatively uninitiated to open source software”
  - “knocking all of open source because one developer with one program doesn’t list necessary specs is a little silly”
Open source ref tracking

- Bad news
  - Not a lot of options
- Good news
  - Not a lot of options, period 😞
- Most important: making the move to digital stat collection 😊
Ref tracking options

- Three options
  - Commercial
    - Altarama’s RefTracker
    - Lack of options should tell us something
  - Locally developed
    - Extra programmers laying around?
    - Excel spreadsheets are less than ideal
  - Open source
    - Several floating around
    - Only Libstats has established itself
Why Libstats?

- Developed at U of Wisconsin-Madison
- Now truly open source, with code freely available
- Even as is, it’s quite functional
- Not publicly exposed – doesn’t need to be beautiful or sexy
Why Libstats, cont.

- Installs in mere minutes
- Tiny application (< 200KB)
- Small database footprint (big library, one year = 1.5 MB)
- Free, built by a library for library use
- Feature rich
- If many use it, greater chance that it will continue to evolve
Why not use Excel?

- Can’t be open in multiple locations
- Not accessible from off-network
- Not a foolproof interface
- Searching is tedious, at best
- Simply will not scale well for a busy location
Many IT shops not fond of PHP, or at least PHP they didn’t write
Libstats uses a PHP package that may not be installed locally
Even if allowed, may require haggling, begging, wheedling, bribing, etc.
Do not let this be an obstacle
A way out of the PHP box

- Use a commercial Web host
  - Application neutral
  - Less than $2/month, or free!
- No need for a domain name
- Moral: don’t let technology issues get in the way; it costs more to argue about than to use a commercial host
- K-State Libraries is in this boat
What you’ll need: Server

- Basic **LAMP** or **AMP** Webserver
  - Yours or commercial
  - **Apache** (the Webserver software)
  - **MySQL** (open source database server)
  - **PHP** (the code)
- **Teeny** amount of disk space (less than 20 MB for years of data)
- Uses common versions of **AMP**
What you’ll need: Staff

- **Necessary skills**
  - Comfortable with command-line UNIX, at least as a user
  - Minimal MySQL knowledge
- **Highly desired skills**
  - Sense of humor
  - Patience
What you’ll need: Extras

- Server-side work is minimal, unless you want to modify the application
- Helpful to have intermediate Excel skills to work with the reports
History of Libstats at K-State

Photo by David Domingo
History of Libstats at K-State

Photo by Steve Bridger
History of Libstats at K-State

• Summer 2006

• Fall 2006: War on
History of Libstats at K-State

- Oct. 19: General Information Services Department decides to explore options

- Nov. 2: Dale shares several implementations he found: [http://del.icio.us/daskey/ref_stats](http://del.icio.us/daskey/ref_stats).
History of Libstats at K-State

- Nov. 5: I send the following query to LIBREF-L

  Do any of you know of a user-friendly program that facilitates recording of information about reference transactions, e.g. length, type, patron category, general topic?

  The desk at which I work is staffed by two people at all times. We currently record statistics on a paper form and then have one of our students type them in to an excel file. In the interest of streamlining the process and saving trees, we'd like to switch to recording the data in electronic form. We've considered the obvious solution of simply recording the data directly into the excel file, but would like to find something that would allow both of our stations to record data simultaneously to the same location.

  I'd be grateful for any leads/advice.
History of Libstats at K-State

• I received several suggestions:
  
  – Google Docs
  – Microsoft Access
  – Microsoft Excel
    • share a workbook following the instructions at: 
      http://exceltips.vitalnews.com/Pages/T0857_Sharing_Your_Workbook.html
  
  – RefTracker by Altarama Information Systems
  – Libstats
History of Libstats at K-State

- Nov. 6: Dale downloads and installs Libstats.
- Nov. 7: The Hale Library Help Desk begins testing Libstats.
- Nov.-Dec.: It’s love.
History of Libstats at K-State

- Customizing Libstats:
History of Libstats at K-State

• Instructions:
  
  – Customized text for clickable help for the location, patron type, backdate, question, and answer fields.
  
  – Created a document with detailed instructions.
History of Libstats at K-State

• Staff’s Initial Reaction
  – Seemed mostly positive
  – Hesitant to record initials
  – Uncertain how much to record.

• Danielle’s response to concerns
  – Assured staff that there would be no repercussions for incorrect answers
  – Allowed each person to record as much or as little as he/she wanted.
  – Surveyed staff to learn more.
History of Libstats at K-State

• Adoption by other K-State Libraries’ reference desks:
  – July 1, 2007: Government Documents, Maps, Microforms
  – August 11, 2007: Dow Chemical Multicultural Resource Center
  – September 20, 2007: Weigel Architecture Library
  – February 11, 2008: Love Science Library
  – February 18, 2008: Feidler Engineering Library
  – February 18, 2008: Math/Physics Library
Potential changes to Libstats

• Violating the 5 option per list rule:
  – Adding an n/a option for each choice field
  – Adding “building” and “techprob” to the question type field
  – Adding “K-12 student” and “other college” to the patron type field
Potential changes to Libstats

• Use for purposes other than recording transactions
  – Record essential knowledge and facts
  – Record policies and procedures
  – Post messages
  – Track the status of building and technology problems
Potential changes to Libstats

- Develop codes to make it easier to record common questions and answers
  - qqprint, qqscan, qqcallnumber
Potential changes to Libstats

- More difficult changes:
  - Create a new field for effort it takes to answer a question. Use the READ scale.
  - Develop a method for commenting to transactions
  - Enhance the built-in reports
History of Libstats at K-State

Photo by Steve Bridger
Applications for Management

- Querying the database
- Making staffing decisions
- Promoting reference
- Improving the quality of reference service
- Helping the library meet users’ needs.
Querying the database

- Searching Libstats
  - Two methods: quick search and advanced search
Querying the database

- **Quick Search**
  - Searches the question, answer, and initials fields
  - Can use quotation marks to search for phrases
  - Returns all transactions with ALL the terms and phrases in the query
  - Can use * as a truncation symbol
  - Useful for staff and management to see how particular questions are being answered.
Querying the database

### Library Stats: Advanced Search

<table>
<thead>
<tr>
<th>Library</th>
<th>Location</th>
<th>Initials</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hale Help</td>
<td>All Locations</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Containing Text:**

**Notes:**
- Use quotes for phrases: "ISO 9000"
- Use * for truncation: standard*
- Words shorter than three letters are not searchable.
- Dates can be of the forms:
  - Standard mm/dd/yy (6/15/05)
  - Standard with time (6/15/05 3:12 PM)
  - Time only (3:12 pm)
  - Text dates (June 15, 2005)
  - Relative dates (3 months ago)
  - Try other things; you'll see if they work.

[Run Search]
Querying the database

Library Stats : Advanced Search

- Library:
  - Hale Help
  - All Libraries
  - Architecture
  - Fiedler
  - GovPub-Microforms
  - Hale Circ
  - Hale Help
  - Hale MRC
  - Love Science
  - Math/Physics
  - Salina
  - Vet Med

- Location:
  - All Locations

- Initials

- Start Date

- End Date

- Run Search

- Relative dates (3 months ago)
- Try other things; you'll see if they work.
Querying the database

Library Stats: Advanced Search

Options:
- Library: Hale Help
- Location: All Locations
- Containing Text: All Locations
- Notes:
  - Use quotes for phrases: office
  - Use * for truncation: s home
  - Words shorter than three letters are not searchable.
  - Dates can be of the forms:
    - Standard mm/dd/yy (6/15/05)
    - Standard with time (6/15/05 3:12 PM)
    - Time only (3:12 pm)
    - Text dates (June 15, 2005)
    - Relative dates (3 months ago)
    - Try other things; you'll see if they work.

Run Search
Querying the database

• Reasons to use the Advanced Search
  – See how many times a particular question came up during a certain time period
    • e.g. search for color print* in January
  – See how many questions a particular staff person answered over a certain time period
Querying the database

Library Stats : Advanced Search

- Library: Hale Help
- Location: All Locations
- Initials: jmc
- Start Date: 3/09/08 12:00 AM
- End Date: 3/16/08 12:00 AM

Containing Text:

Notes:

- Use quotes for phrases: "ISO 9000"
- Use * for truncation: standard*
- Words shorter than three letters are not searchable.
- Dates can be in the forms:
  - Standard mm/dd/yy (6/15/05)
  - Standard with time (6/15/05 3:12 PM)
  - Time only (3:12 pm)
  - Text dates (June 15, 2005)
  - Relative dates (3 months ago)
  - Try other things; you'll see if they work.

Run Search
Querying the database

- How else might you use the Advanced Search?
Querying the database

- Running Reports
# Querying the database

## Library Stats : Reports

Please choose from these 7 reports.

1. **Data Dump**
   Sends a complete dump of report data to your computer for manipulation in a spreadsheet. [Pivot Tables](#) are fantastic for this.

2. **Data Dump with Questions and Answers**
   Send a complete dump of data including questions and answers in CSV format.

3. **Questions by Date**
   This report provides the count of questions for each day.

4. **Questions by Patron Type**
   This report provides the count of questions for every patron type.

5. **Questions by Question Format**
   This report provides the count of questions for every question format.

6. **Questions by Time of Day**
   This report provides the count of questions for each hour of the day.

7. **Questions by Weekday**
   This report provides the count of questions, counted for each day of the week.
Querying the database

Library Stats : Add Date Criteria

You have chosen this report:

Questions by Date
This report provides the count of questions for each day.

Begin Date:  End Date:

Library:  Hale Help  Location:  All Locations

Run Report
## Querying the database

### Hale Help

Questions by Date from 03-01-2008 through 03-14-2008

<table>
<thead>
<tr>
<th>Date</th>
<th>Weekday</th>
<th>Question Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>03-13-2008</td>
<td>Thursday</td>
<td>134</td>
<td>9.3%</td>
</tr>
<tr>
<td>03-12-2008</td>
<td>Wednesday</td>
<td>161</td>
<td>11.2%</td>
</tr>
<tr>
<td>03-11-2008</td>
<td>Tuesday</td>
<td>150</td>
<td>10.5%</td>
</tr>
<tr>
<td>03-10-2008</td>
<td>Monday</td>
<td>139</td>
<td>9.7%</td>
</tr>
<tr>
<td>03-09-2008</td>
<td>Sunday</td>
<td>86</td>
<td>6%</td>
</tr>
<tr>
<td>03-08-2008</td>
<td>Saturday</td>
<td>45</td>
<td>3.1%</td>
</tr>
<tr>
<td>03-07-2008</td>
<td>Friday</td>
<td>86</td>
<td>6%</td>
</tr>
<tr>
<td>03-06-2008</td>
<td>Thursday</td>
<td>122</td>
<td>8.5%</td>
</tr>
<tr>
<td>03-05-2008</td>
<td>Wednesday</td>
<td>152</td>
<td>10.6%</td>
</tr>
<tr>
<td>03-04-2008</td>
<td>Tuesday</td>
<td>129</td>
<td>9%</td>
</tr>
<tr>
<td>03-03-2008</td>
<td>Monday</td>
<td>136</td>
<td>9.5%</td>
</tr>
<tr>
<td>03-02-2008</td>
<td>Sunday</td>
<td>61</td>
<td>4.3%</td>
</tr>
<tr>
<td>03-01-2008</td>
<td>Saturday</td>
<td>34</td>
<td>2.4%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>13</strong></td>
<td><strong>1435</strong></td>
<td><strong>100.1%</strong></td>
</tr>
</tbody>
</table>
Querying the database

Library Stats : Reports
Please choose from these 7 reports.

1 Data Dump
Sends a complete dump of report data to your computer for manipulation in a spreadsheet. Pivot Tables are fantastic for this.

2 Data Dump with Questions and Answers
Send a complete dump of data including questions and answers in CSV format

3 Questions by Date
This report provides the count of questions for each day.

4 Questions by Patron Type
This report provides the count of questions for every patron type.

5 Questions by Question Format
This report provides the count of questions for every question format.

6 Questions by Time of Day
This report provides the count of questions for each hour of the day.

7 Questions by Weekday
This report provides the count of questions, counted for each day of the week.
Querying the database

Data Dump

Sends a complete dump of report data to your computer for manipulation in a spreadsheet. Pivot Tables are fantastic for this.

Begin Date: [ ] End Date: [ ]

Library: [ ] Location: [ ]

Run Report
Querying the database

Opening Hale

You have chosen to open

Hale

which is a: text/x-csv
from: http://www.ksulib.org

What should Firefox do with this file?

- Open with [ ]
- Save to Disk [ ]
- Do this automatically for files like this from now on. [ ]

OK Cancel
Querying the database
Querying the database

Text Import Wizard - Step 1 of 3

The Text Wizard has determined that your data is Fixed Width. If this is correct, choose Next, or choose the data type that best describes your data.

Choose the file type that best describes your data:
- **Delimited** - Characters such as commas or tabs separate each field.
- **Fixed width** - Fields are aligned in columns with spaces between each field.

Start import at row: 1
File origin: 437 : OEM United States

Preview of file C:\Documents and Settings\coleman\Desktop\Hale.

1: question_id,patron_type,question_type,time_spent,question_format
2: undergrad,technical,1-5,in person,help desk,1/04/2007 09:17:33
3: grad,tech referral,1-5,in person,help desk,1/04/2007 09:24:19
4: undergrad,referral,1-5,in person,help desk,1/04/2007 09:53:59
5: undergrad,technical,1-5,in person,help desk,1/04/2007 10:45:41
Querying the database

Text Import Wizard - Step 2 of 3

This screen lets you set the delimiters your data contains. You can see how your text is affected in the preview below.

Delimiters
- Tab
- Semicolon
- Comma
- Space
- Other:

Treat consecutive delimiters as one

Text qualifier: "

Data preview

<table>
<thead>
<tr>
<th>question_id</th>
<th>patron_type</th>
<th>question_type</th>
<th>time_spent</th>
<th>question_format</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>undergrad</td>
<td>technical</td>
<td>1-5</td>
<td>in person</td>
</tr>
<tr>
<td>3</td>
<td>grad</td>
<td>tech referral</td>
<td>1-5</td>
<td>in person</td>
</tr>
<tr>
<td>4</td>
<td>undergrad</td>
<td>referral</td>
<td>1-5</td>
<td>in person</td>
</tr>
<tr>
<td>6</td>
<td>undergrad</td>
<td>technical</td>
<td>1-5</td>
<td>in person</td>
</tr>
</tbody>
</table>
Querying the database

Import Data

Where do you want to put the data?
- Existing worksheet: 
  - =$A$1
- New worksheet

Create a PivotTable report...

Properties... Parameters... Edit Query...
### Querying the database

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>question_id</td>
<td>patron_type</td>
<td>question_type</td>
<td>question_format</td>
<td>location_name</td>
<td>question_time</td>
<td>question_date</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>undergrad</td>
<td>technical</td>
<td>in person</td>
<td>help desk</td>
<td>10:45:54 AM</td>
<td>1/4/2007</td>
</tr>
<tr>
<td>7</td>
<td>9</td>
<td>faculty</td>
<td>referral</td>
<td>in person</td>
<td>help desk</td>
<td>11:34:09 AM</td>
<td>1/4/2007</td>
</tr>
<tr>
<td>8</td>
<td>10</td>
<td>grad</td>
<td>technical</td>
<td>in person</td>
<td>help desk</td>
<td>11:34:22 AM</td>
<td>1/4/2007</td>
</tr>
<tr>
<td>10</td>
<td>12</td>
<td>other/unknown</td>
<td>tech referral</td>
<td>in person</td>
<td>help desk</td>
<td>1:52:17 PM</td>
<td>1/4/2007</td>
</tr>
<tr>
<td>12</td>
<td>15</td>
<td>other/unknown</td>
<td>technical</td>
<td>in person</td>
<td>help desk</td>
<td>2:03:13 PM</td>
<td>1/4/2007</td>
</tr>
<tr>
<td>16</td>
<td>37</td>
<td>other/unknown</td>
<td>tech referral</td>
<td>in person</td>
<td>help desk</td>
<td>5:03:54 PM</td>
<td>1/4/2007</td>
</tr>
<tr>
<td>17</td>
<td>41</td>
<td>other/unknown</td>
<td>reference</td>
<td>in person</td>
<td>help desk</td>
<td>5:11:44 PM</td>
<td>1/4/2007</td>
</tr>
<tr>
<td>18</td>
<td>45</td>
<td>faculty</td>
<td>directional</td>
<td>in person</td>
<td>help desk</td>
<td>9:28:14 AM</td>
<td>1/5/2007</td>
</tr>
<tr>
<td>19</td>
<td>46</td>
<td>faculty</td>
<td>reference</td>
<td>in person</td>
<td>help desk</td>
<td>9:28:38 AM</td>
<td>1/5/2007</td>
</tr>
<tr>
<td>20</td>
<td>47</td>
<td>undergrad</td>
<td>directional</td>
<td>in person</td>
<td>help desk</td>
<td>9:36:24 AM</td>
<td>1/5/2007</td>
</tr>
<tr>
<td>21</td>
<td>48</td>
<td>undergrad</td>
<td>technical</td>
<td>in person</td>
<td>help desk</td>
<td>9:42:07 AM</td>
<td>1/5/2007</td>
</tr>
<tr>
<td>22</td>
<td>51</td>
<td>other/unknown</td>
<td>reference</td>
<td>in person</td>
<td>help desk</td>
<td>10:34:03 AM</td>
<td>1/5/2007</td>
</tr>
<tr>
<td>23</td>
<td>52</td>
<td>other/unknown</td>
<td>directional</td>
<td>in person</td>
<td>help desk</td>
<td>10:35:12 AM</td>
<td>1/5/2007</td>
</tr>
<tr>
<td>24</td>
<td>53</td>
<td>other/unknown</td>
<td>directional</td>
<td>in person</td>
<td>help desk</td>
<td>10:45:40 AM</td>
<td>1/5/2007</td>
</tr>
<tr>
<td>25</td>
<td>54</td>
<td>grad</td>
<td>reference</td>
<td>in person</td>
<td>help desk</td>
<td>11:03:54 AM</td>
<td>1/5/2007</td>
</tr>
<tr>
<td>26</td>
<td>56</td>
<td>other/unknown</td>
<td>directional</td>
<td>in person</td>
<td>help desk</td>
<td>12:56:34 PM</td>
<td>1/5/2007</td>
</tr>
<tr>
<td>27</td>
<td>59</td>
<td>undergrad</td>
<td>technical</td>
<td>in person</td>
<td>help desk</td>
<td>1:18:56 PM</td>
<td>1/5/2007</td>
</tr>
</tbody>
</table>
Staffing Decisions

Examples

- When to staff IM off the desk
- When to single staff the desk
- When to request additional staffing to help with technology questions.
Staffing decisions

**Question:** When is IM service too busy between 8-5 M-F to staff from the Hale Library Help Desk?

**Analysis:**
1. Sort data by question format
2. Sort IM by day of week, then by time
3. Count number of IM transactions for each hour of each day.
Staffing decisions

Total IM for 2007 Fall Semester by Hour

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00-9:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:00-10:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:00-11:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00-12:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:00-1:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:00-2:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:00-3:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>5:00-6:00</td>
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</tbody>
</table>

Count

Time
Sundays: Avg # IM questions per hour 1/1/08-3/29/08

Hour

1-2  2-3  3-4  4-5  5-6  6-7  7-8  8-9  9-10

0.00  0.20  0.40  0.60  0.80  1.00  1.20
Sundays: Avg Minutes answering IM questions 1/1/08 - 3/29/08
Mondays: Avg # IM questions per hour 1/1/08-3/29/08
Mondays: Avg Minutes answering IM questions 1/1/08 - 3/29/08
Wednesdays: Avg Minutes answering IM questions 1/1/08 - 3/29/08
Thursdays: Avg Minutes answering IM questions 1/1/08 - 3/29/08

Hour
8-9 9-10 10-11 11-12 12-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10

Minutes Answering IM questions:
- 8-9: 2.0
- 9-10: 4.0
- 10-11: 6.0
- 11-12: 4.0
- 12-1: 4.0
- 1-2: 3.0
- 2-3: 4.0
- 3-4: 4.0
- 4-5: 14.0
- 5-6: 8.0
- 6-7: 4.0
- 7-8: 6.0
- 8-9: 10.0
- 9-10: 16.0
Fridays: Avg Minutes answering IM questions 1/1/08 - 3/29/08
Average Minutes Answering IM questions 1/1/08 - 3/29/08

- Sunday
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
Question: When is the Hale Library Help Desk slow enough to have just one staff person working there?

Analysis:
1. Sort data by day of week, then by time
2. Count number of transactions for each hour for each day.
3. Calculate average number of transactions for each hour for each day.
Staffing decisions

Fall 2007 Average Hourly Transactions

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00-9:00</td>
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<td>12:00-1:00</td>
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<td>6:00-7:00</td>
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<td>7:00-8:00</td>
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<td>9:00-10:00</td>
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</tr>
</tbody>
</table>

Average Number of Transac

Time

- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday
Sundays: Avg # of Questions at the HLHD per hour 1/1/08 - 3/29/08
Sundays: Avg Minutes Answering Questions at the HLHD 1/1/08 - 3/29/08
Mondays: Avg # of Questions at the HLHD per hour 1/1/08 - 3/29/08
Mondays: Avg Minutes Answering Questions at the HLHD 1/1/08 - 3/29/08
Tuesdays: Avg # of Questions at the HLHD per hour 1/1/08 - 3/29/08
Tuesdays: Avg Minutes Answering Questions at the HLHD 1/1/08 - 3/29/08
Wednesdays: Avg # of Questions at the HLHD per hour 1/1/08 - 3/29/08
Wednesdays: Avg Minutes Answering Questions at the HLHD 1/1/08 - 3/29/08
Thursdays: Avg # of Questions at the HLHD per hour 1/1/08 - 3/29/08

Hour

8-9
9-10
10-11
11-12
12-1
1-2
2-3
3-4
4-5
5-6
6-7
7-8
8-9
9-10

0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
Thursdays: Avg Minutes Answering Questions at the HLHD 1/1/08 - 3/29/08
Saturdays: Avg # of Questions at the HLHD per hour 1/1/08 - 3/29/08
Saturdays: Avg Minutes Answering Questions at the HLHD 1/1/08 - 3/29/08
Average # of Questions at the HLHD per hour 1/1/08 - 3/29/08
Average Minutes Answering Questions at the HLHD 1/1/08 - 3/29/08
Staffing Decisions

**Question:** When does the desk receive the most technology related questions?

**Analysis:**
1. Sort data by question type
2. Sort technology and technology referrals by day and then by time.
3. Count total for each day and time.
Staffing Decisions

• Other types of staffing decisions
  – When to have most experienced staff
  – When to request additional help from technically adept staff

• Can you think of other ways to use Libstats to help with staffing decisions?
Promoting Reference

- Share examples with colleagues to show them what reference services are all about.
- Use data on question frequency and length to demonstrate need for highly trained staff.
- Share example questions with patrons.
- How else could the information be used to promote reference?
Improving the quality of reference service

- Train for common questions
- Use database as a knowledge base
  - Expand answers
  - Tag high quality answers to enable staff to find them via a search, e.g., aaaaaaa
- Develop a public FAQ based on authentic questions.
Improving the quality of reference service

- Encourage staff to read and search Libstats
- Turn Libstats into a knowledge base
  - Expand answers
  - Tag high quality answers to enable staff to find them via a search, e.g., aaaaaa
- Develop a public FAQ based on authentic questions.
- How else could Libstats help improve the quality of reference service?
Helping the library meet users’ needs

- Data on questions is a rich source of information about users’ needs
- Having the data helps public services make a strong case for changes to better meet those needs.
### Example: Helping patrons pay for printing

<table>
<thead>
<tr>
<th>Edit</th>
<th>Patron Type</th>
<th>Question Type</th>
<th>Question Format</th>
<th>Location</th>
<th>Question / Answer</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2109</td>
<td>undergrad</td>
<td>technical 0-1</td>
<td>in person</td>
<td>Hale Help desk</td>
<td>Q: guy wanted to print but no card and no allotment A: I printed off mine and he tried to pay me. I told him to give it to charity.</td>
<td>2/22/2007 4:02 AM</td>
</tr>
<tr>
<td>2137</td>
<td>undergrad</td>
<td>reference 0-1</td>
<td>in person</td>
<td>Hale Help desk</td>
<td>Q: how can I print out my 3 page paper when I only have 20 cents left on my eID; and I need to have it in 10 minutes A: add some money to id card chip (but she didn't have any money); or ask someone nicely if they will print it for you with their eID (which some nice young man did)</td>
<td>2/22/2007 8:14 PM</td>
</tr>
<tr>
<td>2918</td>
<td>undergrad</td>
<td>technical 0-1</td>
<td>in person</td>
<td>Hale Help desk</td>
<td>Q: I'm trying to add money to my K-State ID so I can do more printing, but the machine is saying my chip is mute. A: I lent her one of our Generic Smart Cards and had her put money on it to pay for her prints. When she gave it back she said she put two much money on it, but that she was happy to donate it for the good of the library!</td>
<td>3/11/2007 8:14 PM</td>
</tr>
</tbody>
</table>
Helping the library meet users’ needs

• Other examples:
  – Change default settings on scanners
  – Acquire a change machine that can break bills greater than $5

• Possibilities
  – Document demand for a public fax machine
  – Inform collection development
  – Inform design of website

• How else could Libstats be used to help meet users’ needs?
Applications for Management

- Querying the database
- Making staffing decisions
- Promoting reference
- Improving the quality of reference service
- Helping the library meet users’ needs.
- How else could managers use Libstats?
Staff Training and Evaluation
Staff Training and Evaluation

- Are other libraries using a web-based tracking system for reference staff training?
- 2007 HLHD staff survey results
- 2008 Tracking Reference Statistics Survey results
- Staff Training
- Reference Reflection & Assessment
Are other libraries using this type of tool for staff training?


What are other librarians saying?

Pegasus Librarian

View my complete profile

FRIDAY, OCTOBER 13, 2006

Making reference Desk Statistics Fun and Even More Useful

Up until this year, librarians have made little tick marks on a grid to indicate questions answered at the reference desk. We had a new grid every day, and we could tick off how many short questions and long questions we answered every hour, as well as how many questions we'd solved jointly with the IT help people, and how many questions we simply referred to the IT people (I'll write more about our IT help later, but for now suffice it to say that we have joint service point in the library). I hate to think how much time was put into compiling these paper tick marks each week.

But this year, we've beefed up our statistics. In fact, it's becoming much more than a statistics-collection project. We're building a knowledge base and learning from our co-workers' reference interactions.

### Question 1
I find the process of entering transactions in LibStats...

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Count (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Difficult</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Somewhat Difficult</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Fairly Easy</td>
<td>5 (38.46%)</td>
</tr>
<tr>
<td>Extremely Easy</td>
<td>8 (61.54%)</td>
</tr>
<tr>
<td>N/A</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

View Comments Text

### Question 2
How often do you struggle to find time to record your transactions?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Count (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>4 (30.77%)</td>
</tr>
<tr>
<td>Very infrequently</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Fairly infrequently</td>
<td>7 (53.85%)</td>
</tr>
<tr>
<td>Fairly often</td>
<td>2 (15.38%)</td>
</tr>
<tr>
<td>Very often</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>N/A</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

View Comments Text
What do you like about Libstats?

Search to find answers to frequently asked questions

I like that Libstats is keyword searchable and you can look up your own initials to see all the transactions you’ve entered.

I like that there is a record of the actual transaction, and you can learn from what other people have done.
Training Staff to use Libstats

“It's easy to use”  

Staff Survey Response

• **Recording Reference Transactions** guide was created and posted to General Reference wiki
  – Updates added continually

• Training sessions held on case by case basis for new staff along with yearly refresher sessions for returning Help Desk staff
Staff Training

“I think it’s useful to know what has been going on, especially if there are ongoing or similar questions. Also, it’s a learning tool because sometimes people give different answers than I would.”

Staff Survey Response
2008 Tracking Reference Statistics Survey Results

- Survey active from February 28, 2008-March 13, 2008
- 659 respondents
- 70% claim to use paper tally sheet
- 30% using a web-based, desktop, or other type of tracking system to capture reference transactions
2008 Survey Results

I Find the Process of Entering Transactions in this Reference Tracking System...

<table>
<thead>
<tr>
<th>Difficulty Level</th>
<th># Participants Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Difficult</td>
<td>0</td>
</tr>
<tr>
<td>Somewhat Difficult</td>
<td>10</td>
</tr>
<tr>
<td>Fairly Easy</td>
<td>55</td>
</tr>
<tr>
<td>Extremely Easy</td>
<td>92</td>
</tr>
</tbody>
</table>
2008 Survey Results

How Often do You Struggle to Find Time to Enter Your Transactions?

- Never: 29 participants
- Very Infrequently: 57 participants
- Fairly Infrequently: 44 participants
- Fairly Often: 17 participants
- Very Often: 9 participants
2008 Survey Results

Is Your Library Currently Thinking of Moving to a Web-based or Desktop Tracking System?

- **No**: 259
- **Yes**: 56
- **Maybe**: 13
- **Do not know**: 7

# Participants Responding
University of Kansas’ Libstats Experience

Fran Devlin, Anschutz/Watson Reference Coordinator and Humanities Librarian
Training Perspectives on Libstats

• Determine training needs and strengths of reference staff

• Learn how to handle certain types of questions

• See how others answer similar questions

• Form of staff communication

• Use for reference evaluation

• Allows collaborative learning
Q: looking for ASTM special technical publication n.1256 Citation: Fatigue crack growth behavior of Al-Li alloy 1441 Prakash, Raghu V. (Natl Aerospace Lab); Parida, Basant K. Source: ASTM Special Technical Publication, n 1256, Dec, 1995, p 603-616 Database: Compendex

A: they were using Compendex, and Get It took them to the right catalog record. But the link for "special searching instructions..." is not working. So there was no way to find the call no. for the issue that they needed, even though it appears that we have it. Tried Circulation to see if there was additional information in Voyager, but from there it appears that we do not have the item. Reported problem using the link from the catalog record. Referred patron to Alice or Asha at Fiedler, since this was there subject area and subject librarian.
Q: I'm looking for finance journals. Can I do this from any computer in the library?
A: K-state libraries home page for catalog, database, E-journals links. Patron choose e-journals. Database home page & E-journals for citation linker. Yes, you can do this from all the computers in the library. -Showed patron link to KSU libraries homepage on the K-State homepage. Left patron with reference to stacks guide for hardcopies.
Q: Looking for articles about "the New Social Contract"
A: Said he had been searching for a LONG time and did not know what he was doing. He was trying to find "new social contract" as a database. Got some more info about what he was looking for - it's a business concept, but for a communication class. Found some articles in ProQuest. He needed articles of different types, so it helped that it broke the articles down by type. Showed him how to e-mail them to himself. He said "you make this easy" and "you saved me about 10 hours of work". Very happy!
Answer Certain Types of Questions

- Scavenger hunts
- Class assignments
- Known Problems/Issues
Scavenger Hunts

Q: Where can I find the volume and issue numbers for Jan.-March 1983 issues of Time? Is the microfilm collection stored in alphabetical or call number order? How can I find out the major headline on the New York times for December 8, 1941?

• A: v. 121, no. 1 thru v. 121, no. 13/call number order/Microforms (3rd Floor, Hale) *Note: this is a Speech "scavenger hunt" assignment we also got thru IM last week.
Class Assignments
“Use in case of recurring class project questions”
Libstats Survey Response

• Q: Marketing class assignment MKTG 542 - looking for industry info using list of sources from instructor

• A: student was looking for U.S. Market Trends and Forecasts - it is in Stacks due to old age. We looked at the Marketing & Int'l Business subject guide page. Used Business and Company Resource Center, Industry: Child Care - had some more recent info that looked helpful. She also used ABI/Inform for articles.
Known Issue/Problem

“See if there have been any computer or technical problems”

Libstats Survey Response

• Q: What does it mean when the Cash to Chip machine says "Card is Mute"?

• A: Not sure--anyone know this? [Yes - from staff member X - it means that their chip is bad. Sometimes you can fix it by rubbing it with a piece of cloth, such as your shirt. Cotton seems to work best. But if that doesn't work, they need to go to the ID card center and get a new one]
<table>
<thead>
<tr>
<th>Q: How do I do in-text citations in APA?</th>
<th>Q: how to cite information from a website in APA style</th>
<th>Q: questions about APA style and electronic resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: I referred her to the APA citation manual and showed her the section in chapter 3 that addresses in-text citations.</td>
<td>A: used APA manual, plus examples on APA web page, plus KSUL APA guide under Citing Resources</td>
<td>A: suggested where to find more information on citation style for e-resources (OWL at Purdue)</td>
</tr>
</tbody>
</table>
Evaluation: Reference Batting Practice

- Group Discussion and Reflection
  - Grand Slam, Home Run, Strike Out, Bunt, Ball
<table>
<thead>
<tr>
<th>Question</th>
<th>9/05/2007 9:52 PM</th>
<th>9/06/2007 9:51 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q: cited reference search</td>
<td></td>
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<tr>
<td>A: okay, so if I am trying to find an article published before 1996 on</td>
<td></td>
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<tr>
<td>a certain topic, I can narrow the search accordingly... (21:52)</td>
<td></td>
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<tr>
<td>meeboguest6275707: but if I want to find an article published later</td>
<td></td>
<td></td>
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<tr>
<td>than that references that articles, the how do I use the SSCSI to do</td>
<td></td>
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</tr>
<tr>
<td>that? (21:52) helplibraryhelpdesk: you would do a &quot;Cited Reference&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>search screen, do you see it? (21:52) helplibraryhelpdesk: this is</td>
<td></td>
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<tr>
<td>located next to the &quot;search&quot; screen, do you see it? (21:52)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>meeboguest6275707: I see it now. (21:52) helplibraryhelpdesk: sure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q: how to locate social sciences citation index</td>
<td></td>
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<tr>
<td>A: (21:49) meeboguest6275707: how do I find the Social Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citation Index? (21:49) helplibraryhelpdesk: hi! (21:49) meeboguest62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75707: hello! (21:49) helplibraryhelpdesk: It's listed under &quot;find</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ing articles and databases&quot; off the library home page under &quot; (21:50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>meeboguest6275707: can I reference the SSCSI from off-campus? (21:50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>helplibraryhelpdesk: yes, you will be asked for your ID and password</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q: need help on coronary heart disease resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A: couldn't answer in time-helping a face to face patron</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q: how to locate an article if there's no full-text</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q: citation help</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A: how to tell how long an article is by looking at the citation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q: library hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(21:32) asoka250: is the 3rd floor open all night (21:32)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>helplibraryhelpdesk: yes, it is (21:32) asoka250: ok write the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>difference b/w 24hr study area and rest of the floors (21:32)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>helplibraryhelpdesk: the 24 hours study area is open 24 hours 7 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a week whereas the rest of the library is only open 24 hours 5 days a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>week (close early Friday and Saturday nights) (21:33) asoka250: ok</td>
<td></td>
<td></td>
</tr>
<tr>
<td>get it (21:33) asoka250: thankyou very much (21:34) helplibraryhelpdesk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>helplibraryhelpdesk: sure (21:34) helplibraryhelpdesk: have a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>good evening</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q: helped patron locate citations for business research paper</td>
<td></td>
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</tr>
<tr>
<td>A: showed ABI/Inform and how to find citations</td>
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<tr>
<td>Q: Where's PR?</td>
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<td></td>
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<tr>
<td>A: third floor, stack level E</td>
<td></td>
<td></td>
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<tr>
<td>Q: need to find book</td>
<td></td>
<td></td>
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<tr>
<td>A: found in catalog and showed how to locate it</td>
<td></td>
<td></td>
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<tr>
<td>Q: wireless key</td>
<td></td>
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<tr>
<td>A: internal to ITAC</td>
<td></td>
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<tr>
<td>Q: patron needed to find article on recent developments in math and</td>
<td></td>
<td></td>
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<tr>
<td>education</td>
<td></td>
<td></td>
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<tr>
<td>A: expanded academic had several she liked</td>
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<tr>
<td>Q: could you have someone come to a fraternity group to be quiet?</td>
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<tr>
<td>A: (18:44) meeboguest4406997: could we have someone come up to the</td>
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<tr>
<td>4th floor and suggest to the 5 guys to take their group study session</td>
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<td>to another place in the Library, they are on the East side of the</td>
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<tr>
<td>building. (18:44) meeboguest4406997: Thanks (18:45) helplibraryhelpdesk</td>
<td></td>
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<tr>
<td>Thanks for letting us know. (18:45) helplibraryhelpdesk: Our security</td>
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<tr>
<td>guard should be up there walking around and will talk to them (18:45)</td>
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<tr>
<td>meeboguest4406997: not a problem, I just like a library to be a nice</td>
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<tr>
<td>quiet place to study... give imagine that (18:45) meeboguest4406997:</td>
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<tr>
<td>thanks again</td>
<td></td>
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<tr>
<td>Q: patron couldn't find book in stacks</td>
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<tr>
<td>A: was looking in an incorrect location</td>
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<tr>
<td>Q: question on how to unlock a room upstairs</td>
<td></td>
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<tr>
<td>A: patron's group was listed as having reserved the room, so gave key</td>
<td></td>
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<tr>
<td>and requested it to be brought back when</td>
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</tbody>
</table>
Q: What was the French and Indian War?

Q: What was the French and Indian War?
Subject Librarian Assessment

“To see what types of questions are being asked, whether any are from my departments, and how questions are being answered”

Staff Survey Response

– Subject librarians read and evaluate questions answered by other library staff
  • Discuss questions/answers as a group or individually to provide training in subject area of need
Collaborative Learning

Batting Practice

Dialogue, Reflection, Assessment

What can we do differently?

New Collective Knowledge

Subject Librarian Sessions

Challenge Assumptions
Future Training Considerations

• Utilize more controlled vocabulary or codes in the question/answer areas for more refined search capability
• Create FAQS for future training purposes based on actual Libstats questions
• Have subject librarians create stock answers to common questions