Dashboards, Charts & Infographics

Susan Gardner Archambault
Head of Reference & Instruction
LOYOLA MARYMOUNT UNIVERSITY | LOS ANGELES, CA
Why Visualize Data?

• Communicates your message
• Facilitates recognition of patterns and relationships
• Takes advantage of subconscious and innate visual processing capabilities
Line Chart

Shows the position of data points relative to each other as they fluctuate over time to reveal the trend, acceleration or deceleration. They do not have to start at “0.”

Tip 1: Use natural increments

Tip 2: Use four lines or less (easier to read)

Tip 3: Label lines directly next to or on the line itself.

Tip 4: Use bright or dark colors to emphasize the important line
Bar Chart

The numerical values of variables are represented by the height or length of lines or rectangles of equal width to compare numerical data by size or importance. Used to illustrate ranking, part to whole (percentages), deviation or distribution between categories. Needs to start at “0” on the y axis so data doesn’t get distorted.

Tip 1: Use different colors to represent different categories
Tip 2: Shade bars from lightest to darkest for easy comparison
Tip 3: Sort the data so it is not plotted in a random order
Vertical Bar Chart

Average Scores: First Year Seminar Information Literacy Tutorials in 2014

Starting… Types of Info Books Articles Ethics

- Module (across 67 courses)
- Quiz (across 67 courses)
The scores that I received for my students from the interactive exercises and quizzes adequately measured student learning related to the FYS information literacy learning outcomes.

It was easy to use the grade center features in Blackboard (MyLMU Connect) to access student scores for the tutorial modules.

The tutorial modules were easy to incorporate into my course.

Online tutorials are an effective way to incorporate the library in developing my students' information literacy skills.
Stacked Bar Chart

Total Number of Questions by Type and Month
Pie Chart

Divided into sectors totalling 100% to illustrate the relationship of parts to a whole. Should be used sparingly due to difficulty in distinguishing small differences in areas that are similar in size but not next to each other. Also takes up lots of space.

**Tip 1:** Use high contrast colors to help differentiate between segments

**Tip 2:** Use a darker shade or different color to highlight an important segment

**Tip 3:** Put % in labels on or near the chart

**Tip 4:** Put largest slice in 12 o'clock position, and then order by size
Info Commons Collaboration Level

Observed Collaboration

- None (Alone): 87%
- Paired: 7%
- Social: 5%
- Group: 1%

Self Reported Collaboration

- None (Alone): 84%
- Paired: 11%
- Social: 3%
- Group: 2%
## Heat Map: Busy Shifts

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COLOR LEGEND for Quiz Scores
FYS Tutorial: Finding & Evaluating Information (module 3)

Outcome 1: Evaluate Sources

- Rank the relevance of an item to a given information need using the RADAR (Relevance, Authority, Date, Accuracy, & Rationale) framework (85%)
- Categorize a list of sources by the degree that they represent the following elements of the RADAR framework: authority, date/currency, relevancy, and rationale/bias. (73%)
- Identify the four characteristics describing the scope and functionality of library research databases from a list of characteristics describing either databases or the library catalog (73%)
- Select the appropriate tool (library catalog) for finding a book (98%)
- Demonstrate knowledge of the Library of Congress call number system by locating the correct call number ranges for a list of call numbers (92%)
- Choose the appropriate search strategy of “OR” to broaden a search from a list of five possible search strategies (69%)

Outcome 2: Locate & Access Information

- Use the library catalog to search by title and find the call number of a book (97%)
- Identify these search protocols appropriate to the structure of a library catalog: items may be grouped together by subject in order to facilitate browsing; and both keyword searching and controlled vocabulary are search language that could enhance information retrieval (55%)
- Use the journal list to select the database link that will lead to the full text of a given journal (94%)
- Retrieve a book record by author name using the library catalog (94%)
- Understand the Library of Congress classification scheme enough to infer what letter a book’s call number starts with when given a list of sample book titles and the first letter of their call numbers (95%)
Complete list of flags: https://lmu.box.com/flags
<table>
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<th>Level 1 (Easy)</th>
<th>Level 2 (Basic)</th>
<th>Level 3 (Intermediate)</th>
<th>Level 4 (Advanced)</th>
<th>Level 5 (Very Advanced)</th>
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</thead>
</table>
| **Definition** | • Requires the least amount of knowledge  
• No specialized knowledge or expertise  
• No consultation of resources  
• Less than 5 min. (directions, hours, toner/paper changes) | • Requires more effort  
• Minimal specific knowledge and skills  
• Nominal resource consultation (known title searches, policy information, basic & routine technical assistance) | • Requires more time and effort  
• Consultation of ready reference resources or tools  
• Minimal instruction to user  
• Basic reference knowledge and skills (specific reference resources, more complex technical problems, basic instruction on catalogs or databases) | • Requires the consultation of multiple resources  
• Subject specialists may need to be consulted  
• More thorough instruction/assistance  
• Reference skills needed  
• Typically lasts 30+ min. (complex search techniques, cross-referencing resources, re-defining/clarifying topics) |
| **Examples:** | Where are the study rooms?  
What time do you close?  
The printer needs paper.  
Where can I check out headphones?  
Where is the bathroom?  
Referrals where no effort was used to troubleshoot or answer question | What is the call number for *Hamlet*?  
How do I reboot to Windows?  
As a visitor, can I use the library after 8pm?  
How do I connect to the wireless? (basic)  
How do I access databases from off-campus?  
How do I share my file/use LionShare?  
How do I access MYLMU/Blackboard?  
How do I insert a row in Excel?  
How do I print? (procedures)  
Referrals after some question answering attempt | How do I find books on immunology?  
I need the full-text of an article.  
How do I cite a journal article in MLA style?  
How do I find peer-reviewed articles?  
How do I apply animation to Powerpoint?  
What dvds and videos do you have on interpersonal and other kinds of communication? | I need criticisms for both the writing of a play and its production.  
I need the full-text of an article.  
How do I cite a journal article in MLA style?  
How do I find peer-reviewed articles?  
How do I apply animation to Powerpoint?  
What dvds and videos do you have on interpersonal and other kinds of communication? | I’m researching gender roles and college majors in the South. Where do I start?  
How do I conduct a study?  
I need help researching Nigerian Igbo communities in the U.S., including issues surrounding their migration and adjustment, population, and settlement patterns.  
I am researching post war suburban housing development in the LA region.  
I need to research wills written by Mexican women between 1740-1880. |
Infographics

A combination of textual and quantitative data used to highlight key images to tell a story or narrative.

They should reveal info that is otherwise lost in a crowd of data, & message should be significant or surprising.

Free Tools:
- Infogr.am
- Easel.ly
- Piktochart
- Venngage
First Year Seminar Infographic

INFORMATION LITERACY IN THE FYS (2013)

THE LIBRARY INFO LIT TUTORIALS WERE A SUCCESS!

Overall Average Scores:

FYS Info Literacy

Students did the best on Module 1 and struggled in Modules 2, 3, and 4. Let's talk about the “problem” areas.
RHETORICAL ARTS

INFORMATION LITERACY


SAFECODING

PRE-SEARCH WORKSHEET: Topic Exploration

ANNOTATED BIBLIOGRAPHY: Source Evaluation

RESEARCH PAPER OR SPEECH: Using Evidence

IL LEARNING OUTCOMES:

Conceptualize an effective research strategy and then collect, interpret, evaluate and use evidence in written and oral communication.

Distinguish between types of information resources and how these resources meet the needs of different levels of scholarship and different academic disciplines.

COMMON SYLLABUS

Instructors using common assignments

Feedback and Suggested Changes

Revise Pre-search Worksheet to incorporate more reflection and working with sources (combine with elements of research diary)

Adapt simplified Annotated Bibliography rubric from assessment group and make a mandatory assignment

Change Research Diary to a loose set of prompts or eliminate
LIBRARY VISIT HELPPED WITH...

- Scholarly vs. popular
- Get help from librarian
- Finding Info.
- Help find a topic
- Evaluating appropriateness/info.
- Citing sources
- Using evidence/make argument

Feedback and Suggested Changes

Encourage more integration of library visit and info lit assignments or activities to ongoing research projects
Remind FYS faculty that students get a library visit 2nd semester (cut down on redundancy)

LIBRARY VISIT

All 72 sections of Rhetorical Arts attended a librarian-led workshop. That's 1273 first year students!

100%

ATTENDANCE:

STUDENT FEEDBACK

RESEARCH STRATEGIES tutorial:
Make Research Strategies tutorial a mandatory homework assignment.

Helped me develop better search strategies:

73%
PART 3

DASHBOARDS
Dashboard

A visual display of the most important information needed to achieve one or more objectives, consolidated and arranged on a single screen so the information can be monitored at a glance.

Dashboard Platforms:
- LibPas (Counting Opinions)
- LibAnalytics Insight (Springshare)
- Tableau
- Google Sites
- In-house web development
Info Commons Dashboard
Developed by Burney Wong: https://lmu.box.com/commons
Electronic Resources Dashboard

Developed by Marie Kennedy and Marisa Ramirez: https://lmu.box.com/e-dashboard

**E-Journals**

### FY2015 Usage

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<td>Aug</td>
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<td>Sep</td>
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### 7-Year Trend

Note: FY 2012 March-April normalized

#### Quick Facts

1. Number of e-journals with active subscriptions in our collection as of (05-01-2014): **59,300**

#### Top 10 e-Journals

1. New York Times
2. CQ Researcher
3. Los Angeles Times

#### Top 5 e-Journal Providers

1. JSTOR

#### Links

- Site Glossary
- FY2015 title-by-title usage statistics
- FY2014 title-by-title usage statistics
- FY2013 title-by-title usage statistics
- FY2012 title-by-title usage statistics
- FY2011 title-by-title usage statistics
- FY2010 title-by-title usage statistics
- FY2009 title-by-title usage statistics
Computer & Group Study Room Availability Dashboard

(Developed by Burney Wong)

Where can I find a scanner?

- Behind this desk
- In front of the black & white printers
- All of the copiers can scan
More Information

Questions?

Susan Gardner Archambault
susan.gardner@lmu.edu
@susanarcham