

Dashboards,
Charts &
Infographics

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Why Visualize Data?

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

Pre-Attentive Attributes

Attribute	Visual
Color	
Size	•
Shape	
Line Length	
Line Width	
Enclosure	
Orientation	

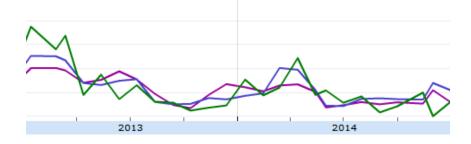
Part 1

CHARTS

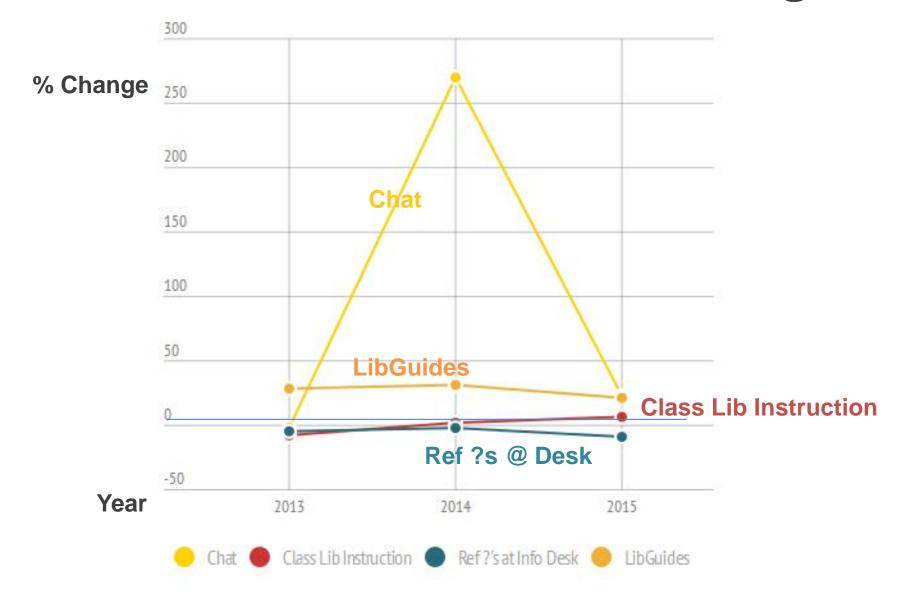
Line Chart

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



LMU Reference Services % Change



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

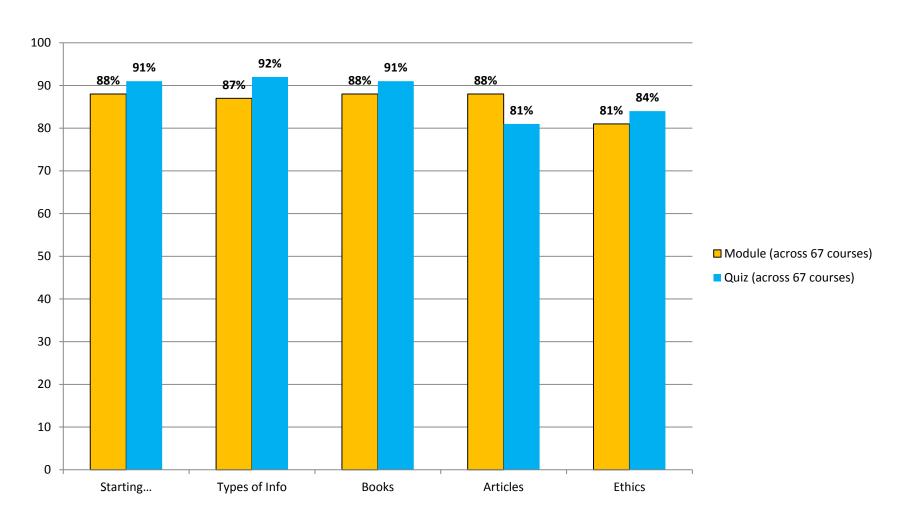
Tip 3: Sort the data so it is not plotted

in a random order



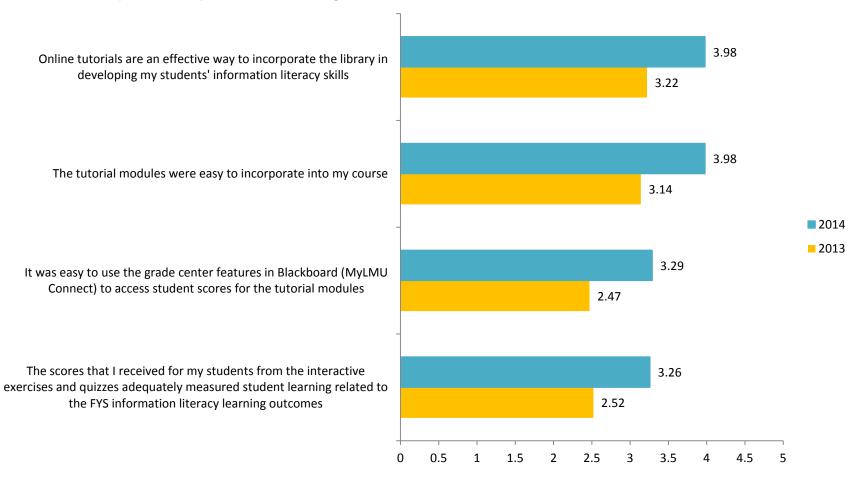
Vertical Bar Chart

Average Scores: First Year Seminar Information Literacy Tutorials in 2014



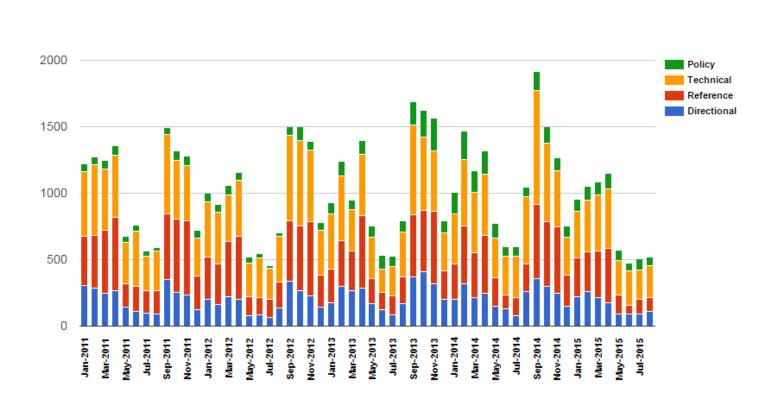
Horizontal Bar Chart

Faculty Survey: Level of Agreement with Statements About the Tutorial



Stacked Bar Chart

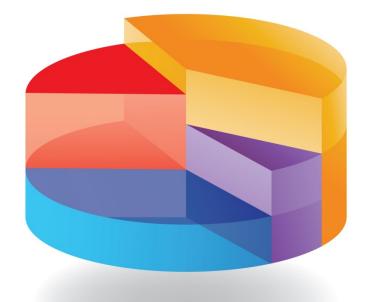
Total Number of Questions by Type and Month



Pie Chart

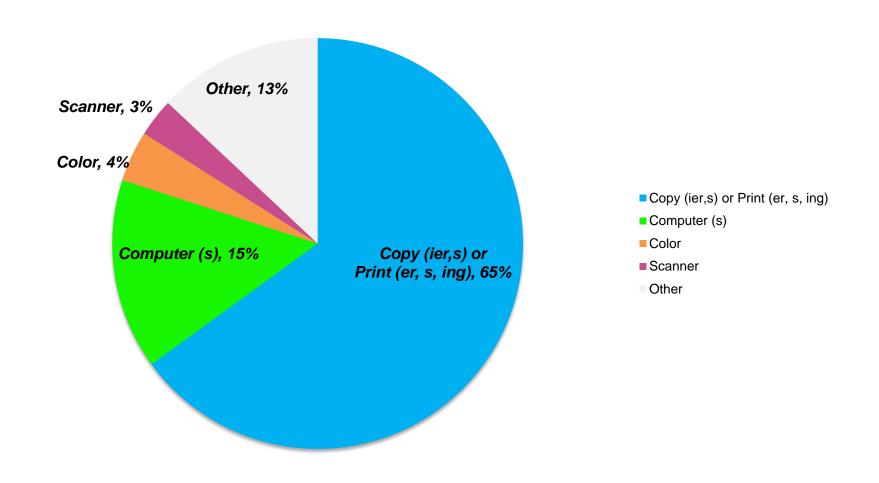
Divided into sectors totalling 100% to illustrate the relationship of parts to a whole. Should be used sparingly due to difficulty in distinguishing small differences in areas that are similar in size but not next to each other. Also takes up lots of space.

- **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 oclock position, and then order by size



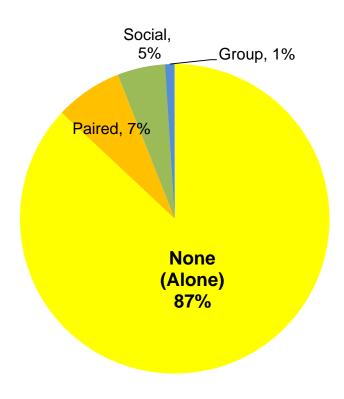
Directional Technology Questions

(Word Count)

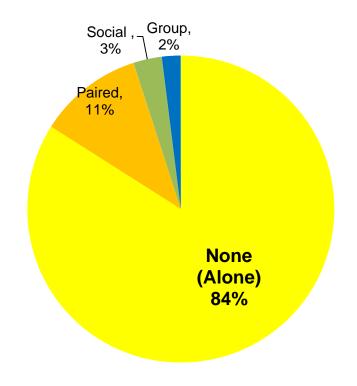


Info Commons Collaboration Level

Observed Collaboration



Self Reported Collaboration



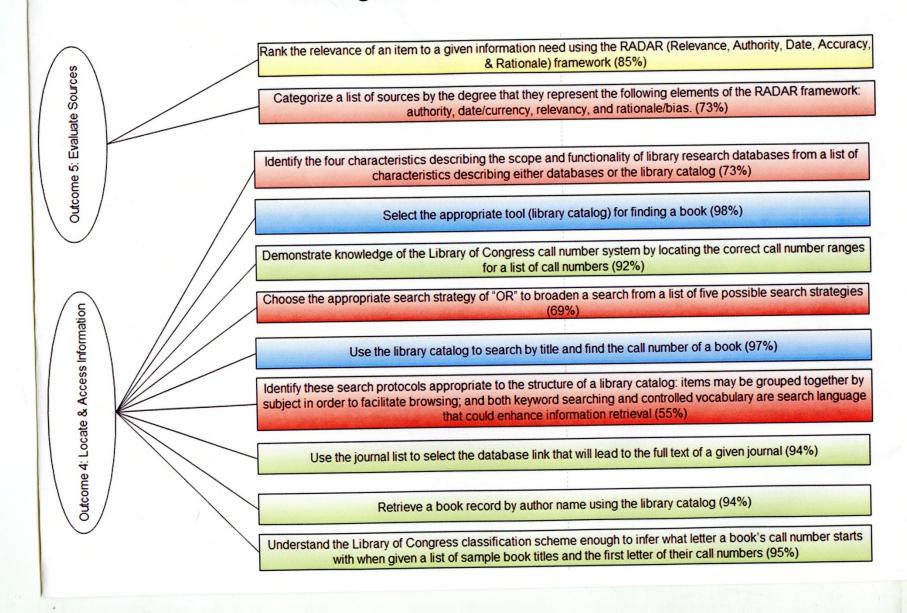
Heat Map: Busy Shifts

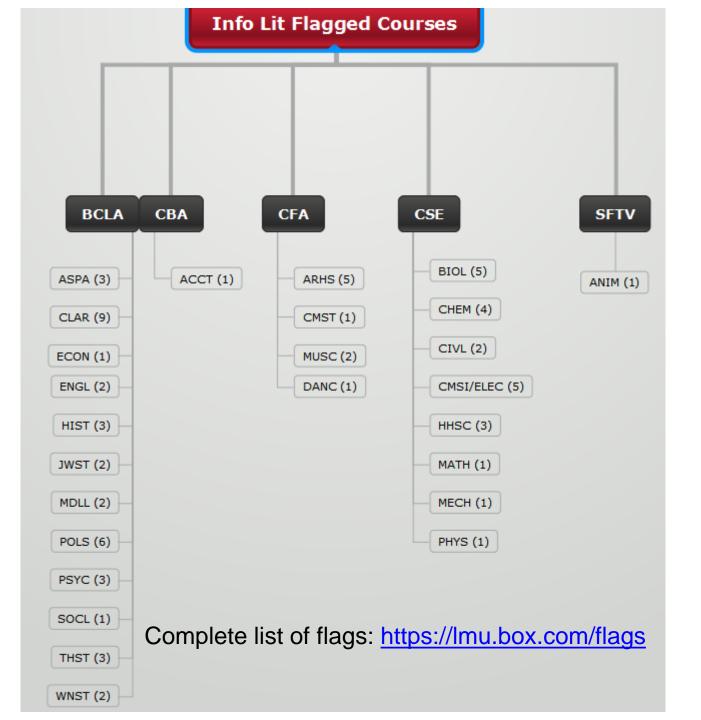
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
12am-1am	12	2	10	21	3	1	
1am-2am	21	1	8	3	1	0	
2am-3am	9	5	7	8	6	0	
3am-4am	2	5	1	5	2	2	
4am-5am	5	3	2	5	1	0	
5am-6am	4	3	3	1	0	0	
6am-7am	3	0	1	2	2	0	
7am-8am	8	11	6	7	1	0	
8am-9am	6	10		8	3	4	
9am-10am	67	84	68	63	37	11	
10am-11am	86	97	104	65	72	25	3
11am-12pm	108	83	104	62	102	1	
12pm-1pm	65	147	139	92	110	47	4
1pm-2pm	73	115	107	84	71	121	3
2pm-3pm	115	119	102	59	72	61	4
3pm-4pm	144	142	96	75	77	64	9
4pm-5pm	169	140	94	120	88	91	8
5pm-6pm	84	107	81	83	37	28	6
брт-7рт	77	119	55	66	9	4	(
7pm-8pm	95	87	97	57	13	19	4
8pm-9pm	78	67	91	46	15	15	5
9pm-10pm	30	36	18	25	11	14	3
10pm-11pm	21	23	17	10	8	9	3
11pm-12am		27	3	12	4	8	2

COLOR LEGEND for Quiz Scores

55 66 66	
69 73 73 73 75 75	
75	
78 79 80 80 84 85 87 88 88	
89.5	
92 92 94 94 94 94.5 95 95	
96 96 96 97 97 98 98 98 98	

FYS Tutorial: Finding & Evaluating Information (module 3)





READ Scale Definitions and Examples

	Level 1 Level 2 Level 3				
(Basic)	(Intermediate)	(Advanced)	(Very Advanced)		
Pefinition 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)	Definition In-depth research effort Consultation of subject specialists Multiple resources Efforts with patron are cooperative; dialogue is created Research & reference knowledge needed Appointments may need to be scheduled Typically lasts 1+ hour (interdisciplinary, question evolution)		
Examples: 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)	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? How do I get started on my	Examples: I need criticisms for both the writing of a play and its production. I'm looking for screenplays of action movies, as well as books on how to write screenplays and interviews with directors. I need two primary and two secondary sources on Cleopatra. Looking for articles/books about the folk song Shenandoah, and for articles on American folk music generally.	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.		
•• • (little — E VA H A a HV HO HL HN H H	Definition Requires more effort Minimal specific knowledge and skills Nominal resource consultation known title searches, policy information, basic & routine sechnical assistance) Examples: What is the call number for Hamlet? How do I reboot to Windows? As a visitor, can I use the library ifter 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?	Definition Requires more effort Minimal specific knowledge and skills Nominal resource consultation known title searches, policy information, basic & routine exchnical assistance) Examples: What is the call number for Hamlet? How do I reboot to Windows? As a visitor, can I use the library infer 8pm? How do I connect to the wireless? (basic) How do I access databases from off-campus? How do I share my file/use inosNare? How do I insert a row in Excel? How do I print? (procedures) Definition 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) Examples: 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 apply animation to Powerpoint? What dvds and videos do you have on interpersonal and other kinds of communication? How do I print? (procedures)	Definition • Requires more effort • Minimal specific knowledge and skills • Nominal resource consultation • 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) Examples: What is the call number for damlet? How do I find books on immunology? Ineed the full-text of an article. How do I connect to the wireless? (basic) How do I connect to the wireless? (basic) How do I share my file/use Johnshare? How do I share my file/use Johnshare? How do I lonert a row in Excel? How do I get started on my Psychology research? How do I get started on my Psychology research? Definition • Requires more time and effort • Mequires more time and effort • Mequires more time and effort • Requires the consultation of multiple resources • Subject specialists may need to be consulted • More thorough instruction on catalogs or databases) • Mare thorough instruction on catalogs or databases) • Mare thorough instruction on catalogs or databases) • Requires the consultation of multiple resources • Subject specialists may need to be consulted • More thorough instruction/ossistance • Reference skills needed • Typically lasts 30+ min. (complex search techniques, cross-referencing resources, re-defining/clarifying topics) I need the full-text of an article. How do I find books on immunology? I need the full-text of an article. 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? How do I get started on my Psychology research?		

PART 2

INFOGRAPHICS

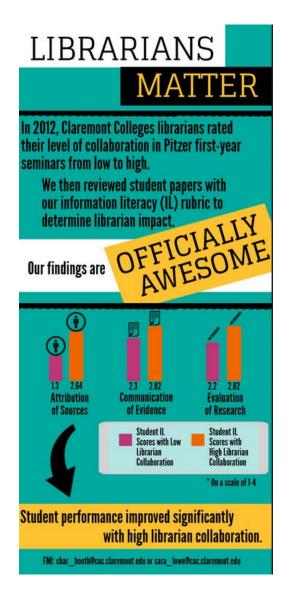
Infographics

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



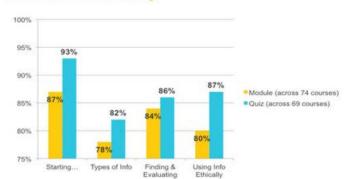
First Year Seminar Infographic

INFORMATION LITERACY IN THE FYS (2013)

THE LIBRARY INFO LIT TUTORIALS WERE A SUCCESS!

Overall Average Scores:

FYS Info Literacy





of first years completed ALL
4 MODULES &
QUIZZES!



STUDENTS DID THE BEST ON MODULE 1

AND STRUGGLED IN MODULES 2.3 AND 4

LETS TALK ABOUT THE "PROBLEM" AREAS

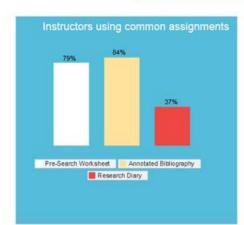
RHETORICAL ARTS

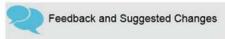
INFORMATION LITERACY

SPRING 2014, RESULTS OF THE FIRST SEMESTER. A COLLABORATION BETWEEN THE INSTRUCTORS OFFICE OF ASSESSMENT, AND THE LIBRARIANS.



COMMON SYLLABUS





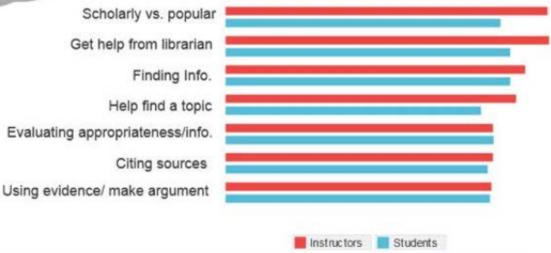
Revise Pre-search Worksheet to incorporate more reflection and working with sources (combine with elements of research diary)

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 HELPED WITH...







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!

STUDENT FEEDBACK



RESEARCH STRATEGIES tutorial:

Make Research Strategies tutorial a mandatory homework assignment.

73%

Helped me develop better search strategies:

PART 3

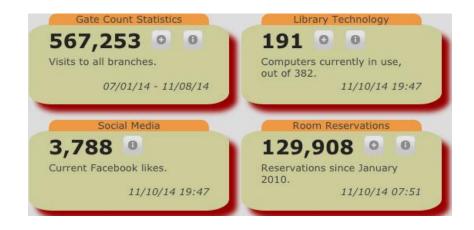
DASHBOARDS

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

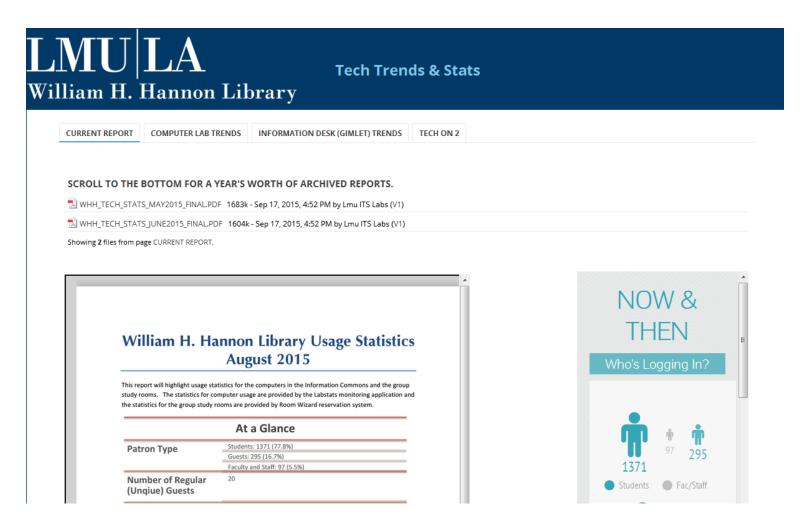
Dashboard Platforms:

- 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

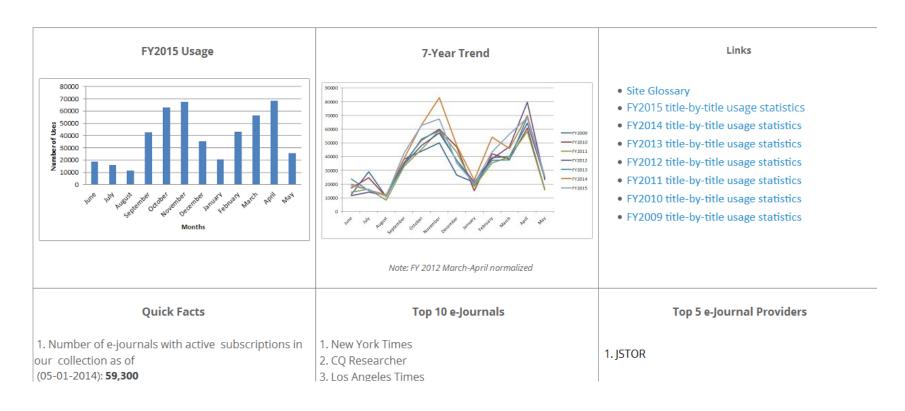


Electronic Resources Dashboard

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

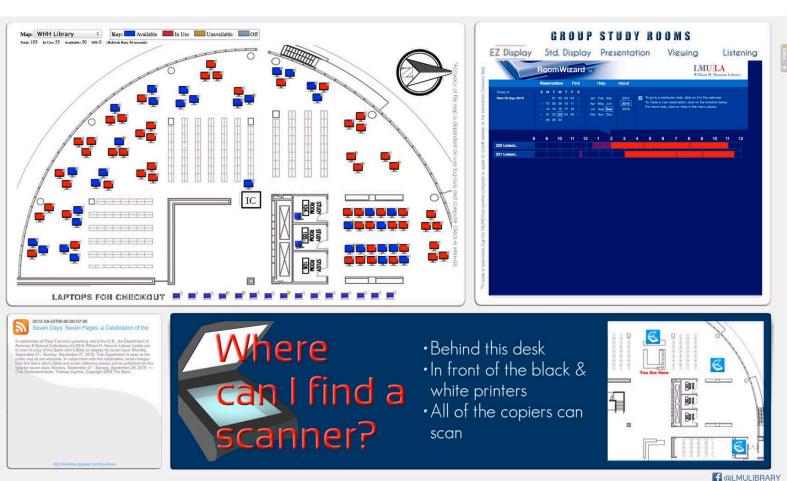
ELECTRONIC RESOURCE USAGE STATISTICS E-JOURNALS DATABASES E-BOOKS REPORTS

E-Journals



Computer & Group Study Room Availability Dashboard (Developed by Burney Wong)

LMU | LA William H. Hannon Library



More Information

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- Dando, P. (2014), Say It With Data: A Concise Guide to Making Your Case and Getting Results, ALA Editions, Chicago, IL.
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Questions?

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