Data Overload? Choose Infographics!

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Camden-Carroll Library
Morehead State University

Presentation at the Kentucky Library Association Annual Conference
The Galt House, Louisville, KY
September 18, 2014
10 Things That Learners Pay Attention To

- Controversy
- Visuals
- Questions
- Contrast
- Comparisons
- Brevity
- Emotions
- Stories
- Problem-solving
- Lists

SHIFT
DISRUPTIVE ELEARNING
<table>
<thead>
<tr>
<th><strong>Do’s</strong></th>
<th><strong>Don’ts</strong></th>
</tr>
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</table>

THE 10 COMMANDMENTS OF TYPOGRAPHY

1. KNOW YOUR FONT FAMILIES EVER HEARD OF QUOTING?
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Library Lovers' Community Activities

Compared with the general US population, library lovers are more engaged in community activities.

- Attend sporting events: 38% (Library Lovers) vs. 32% (All Americans)
- Go to a bookstore: 57% (Library Lovers) vs. 32% (All Americans)
- Go to concerts, plays: 43% (Library Lovers) vs. 30% (All Americans)
- Visit museums, galleries, historic sites: 48% (Library Lovers) vs. 30% (All Americans)
- None of these: 18% (Library Lovers) vs. 35% (All Americans)

Source: Pew Research Center’s Library Services Survey of 6,224 Americans ages 16 and older conducted July 18–September 30, 2013.
10 NEW BREAKTHROUGH TECHNOLOGIES IN 2014

Technology news is full of incremental developments, but few of them are true milestones. Here we’re citing 10 that are. These advances from the past year all solve thorny problems or create powerful new ways of using technology. They are breakthroughs that will matter for years to come.

1. AGRICULTURE DRONES
Relatively cheap drones with advanced sensors and imaging capabilities are giving farmers new ways to increase yields and reduce crop damage.

2. ULTRAPRIVATE SMARTPHONES
New models built with security and privacy in mind reflect the Zeitgeist of the Snowden era.

3. BRAIN MAPPING
A new map, a decade in the works, shows structures of the brain in far greater detail than ever before, providing neuroscientists with a guide to its immense complexity.

4. NEUROMORPHIC CHIPS
Microprocessors configured more like brains than traditional chips could soon make computers far more astute about what’s going on around them.

5. GENOME EDITING
The ability to create primates with intentional mutations could provide powerful new ways to study complex and genetically baffling brain disorders.

6. AGILE ROBOTS
Computer scientists have created machines that have the balance and agility to walk on rough and uneven terrain, making them far more useful in navigating human environments.

7. MICROSCALE 3D PRINTING
inks from different types of materials, precisely applied, are greatly expanding the kinds of things that can be printed.

8. SMART WIND & SOLAR POWER
Big data and artificial intelligence are producing ultra-accurate forecasts that will make it feasible to integrate much more renewable energy into the grid.

9. MOBILE COLLABORATION
The smartphone era is finally getting the productivity software it needs.

10. OCULUS RIFT
Thirty years after virtual-reality goggles and immersive virtual worlds made their debut, the technology finally seems poised for widespread use.

WEEKLYSCIENCE.COM
In 11 seconds $100,457 has been spent on retail online and $1,016,728 has been spent offline in the US.\(^{(1)}\)

### Infographic Elements
- **Printed books:** $5,302
- **E-books:** $1,060
- **Customer:** 3,183
  - **Burgers:** 264
  - **Fries:** 367 lbs
- **Sold:** 42
  - **Lost or stolen:** 2
  - **Apps sold:** 9,069
- **Net sales:** $97,317
- **Net sales:** $15,528
- **Donuts:** 815
- **Coffee:** 1,044
- **Customers:** 209
  - **Viruses removed:** 26
  - **Gadgets recycled:** 75 lbs
- **Sandwiches:** 7
  - **Grilled hotdogs:** 35
  - **Stirpee:** 55
- **Transactions:** 9,139
- **Servings:** 44,854
- **Savings:** $1,221
- **Spending:** $27,207
- **Made in US:** $1,399
  - **Made overseas:** $68,535
- **Pet food:** $7,151
- **Baby food:** $534
- **Toys:** $7,705
- ** Firearms:** $5,232

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Retail is at the heart of our operations, and inspired by the infographic *The Internet in Real-Time*, we were interested in what a visualization of popular US consumer spending would look like. The result *Retail in Real-Time* - a glimpse of how and where the US spends its cash and just how quickly these numbers grow. [Read more about the project here.](http://www.retale.com/info/retail-in-real-time/)
AWORLD of TERROR

Exploring the reach, frequency and impact of terrorism around the world

Islamic State in Iraq and Syria (ISIS)
2002 - 2013

Number of incidents
- 1-15
- 16-60
- 60-115

Incidents 1,194
Killed 8,116
Wounded 19,330

Country with incident — Country of Origin

1970 - 2013

THE GLOBAL TERRORISM DATABASE

The data used in this tool comes from the Global Terrorism Database, the most...
Free Tools

Building Tools:
- Piktochart
- Infogr.am
- Easel.ly

Data Visualization Tools:
- Wordle
- Tagxedo & Tag Cloud
- Many Eyes
Create Your Own Infographic
Piktochart - Charts
DOUBLE-CLICK TO ADD TITLE

This is a dummy text
Enter quote author
Infogr.am Charts

Bar (4)
Column (4)
Pie (3)
Line
Area (3)
Scatter (2)
Bubble (2)
Pictorial (3)
Hierarchy (2)
Table
Progress (2)
Wordcloud
Treemap
Financial (2)

Regular

Visits
Pages
Browser
Blocking
Visits
Search
Pageload
Activity
Referring
Time

Add chart
Infogr.am Settings

- **Theme**
  - Story That Made Headlines
  - Theme: infogr.am default

- **Width**
  - Width: 550 px

- **Custom logo**
  - Options: None, Upload custom, Infogr.am logo

- **Embed button**
  - On/Off

- **Share button**
  - Share on: Facebook

- **Custom link on headline**
  - Options: None, Custom link, Link back to Infogr.am

- **Other options**
  - Right-to-left text option
CCL BUSINESS DATABASES

- Mergent Archives
- BSP
- S & P
- KBR
- First Research
- ASC
- Science Direct
- CQ Researcher
- Mergent Archives
- JSTOR
- Lexis-Nexis A
- Small Bus. Ref. Center
- Value Line

PERSONAL FINANCE

What is it?
Several Concepts...

BANKING,
INVESTING, CREDIT,
LOANS, RETIREMENT,
TAXES, SAVING...
Easel.ly

- **VHemes**
  - vhemes = visual + themes
  - start by dragging a pre-designed vheme onto the canvas

- **Objects**
  - drag and drop icons, shapes, text or upload your own from our extensive library of artwork

- **Text**
  - double-click on text to edit or change

Start from scratch (clears the canvas)
Easel.ly Themes

Easel.ly Objects

**VHemes**

Vhemes = visual + themes

Start by dragging a pre-designed vtheme onto the canvas.

**Objects**

Drag and drop icons, shapes, text or upload your own from our extensive library of artwork.

**TEXT**

do double click on text to edit or change

**OBJECTS**

drag and drop icons, shapes, text or upload your own from our extensive library of artwork.

**Your artboard**

**Start from Canvas**

Ideas Inspired by Art
Results of the Satisfaction Survey Are In!

**What Do Patrons Say About Library Hours?**

- **Satisfied with current open hours**
  - Should be open later at night
  - I like the hours of operation
  - Longer hours on the weekend
- **Unsatisfied with current open hours**
  - I think the library should be open 24/7

- **Open until 2 a.m. Sunday to Wednesday**
- **Open earlier on weekends**

**What Do Patrons Say About Library Technology?**

- Whiteboard tables are great
- Interlibrary loan is a big help
- Online resources are very helpful
- Article databases are great

- Wi-Fi never seems to work
- Need more computers
- Need more desk space in computer lab
- More outlets to charge laptops
- Late night access to printing!

**Additional Patron Suggestions for the Library**

- Organize more reading clubs or a crafting night
- Free printing is a must
- Coffee Shop should stay open later!

Source: 2014 Camden-Carroll Library Satisfaction Survey Results.
Text Tools

Wordle

Tagxedo

Tag Cloud
Many Eyes

Explore
- Visualizations
- Data sets
- Comments
- Topic centers

Participate
- Create a visualization
- Upload a data set
- Create a topic center
- Register

Learn more
- Quick start
- Visualization types
- About Many Eyes
- Privacy
- Blog

Try our featured visualizations

- **Film Comedy Titles**
  - Based on IMDb
  - by shigl

- **Haiti**
  - Haiti DFID Aid Data
  - by ChristGarde

- **Threatened and Endangered Wildlife and Plant Species**
  - 2011 - Endangered species
  - by LJean

- **KFC franchises worldwide (excl US and China)**
  - 2013
  - by brenda233

- **Military, health and education Expenditures**

- **In relation to GDP**
  - by Jocktum

- **Education Levels by State**
  - Based on census data
  - by smgcode

Try out the newest version of IBM Many Eyes!

- **New site design and layout**
  - Find visualization by category and industry
  - New visualization expertise and thought leadership section

- **Expertise on the Expert Eyes blog**
  - Learn best practices to create beautiful, effective visualizations
  - New, innovative visualizations from the visualizations experts of IBM

- **New visualization options**
  - New visualization options for your data, including the addition of a heatmap and view-in-context visualizations

Try ManyEyes v2 ➤
Many Eyes
Many Eyes

Customizing Bubble Chart
Data set: KY Public Libraries (Version 1)

Your visualization will look like this:

ZIP (aggregate)
Disks colored by LIBSYSNAME
Data Sources

- DATA.GOV
- US Census Bureau
- IMLS
- State Resources
- Databases
- Integrated Library System
- StatPlanet
- Google Public Data
Infographics & Marketing

• Highlight Activities
• Program Announcements
• Tell Your Library Story
• Embed in Library web pages or LibGuides
S.C. Williams Library experienced another year of growth across the board, striving to stretch our budget to meet the needs of our ever-growing, ever-changing student and faculty population. The library continues in its mission to keep AHEAD OF THE CURVE in educational technology and top-quality research tools, and to become the physical and virtual educational space that can fully support the institute’s aspirations and goals.

**GATE COUNT**

280,762 VISITORS TO LIBRARY

AN AVERAGE INCREASE OF 20K PER YEAR OVER 5 YEARS

**E-BOOKS**

2009: 18,815
2010: 20,819
2011: 22,7679

**ARTICLES DOWNLOADED**

2009: 2,282
2010: 221,240

**REFERENCES ANSWERED**

2009: 1,557
2010: 1,341

**NEW DIGITAL COLLECTIONS WITH 590 NEW DIGITIZED ITEMS**

**BUDGET (COLLECTIONS)**

2010: 671,034
2011: 741,034

**WEBSITE VISITS**

111,688

**TOP TEN COUNTRIES**

- US
- India
- China
- Mexico
- Argentina
- Malaysia
- United Kingdom
- Dominican Republic
- Canada
- Australia

**CLASSES/WORKSHOPS TAUGHT**

74

**STEVENS ILL LENDING**

2009-2010: 109 Items (Books & documents)
2010-2011: 1,178 Items (Books & documents)

The library's Interlibrary Loan program grew by over 100%, due to the participation in the RapidIL program. By joining forces with other libraries, we can borrow books from other libraries, usually within 10 days, at no charge.

**13 NEW DIGITAL COLLECTIONS WITH 590 NEW DIGITIZED ITEMS**

**112 THESSES PROCESSED:**
36 MASTERS THESIS
33 PHD DOCTORAL DISSERTATIONS
5 SENIOR DESIGN
17 SENIOR THESIS 1A
1 SENIOR THESIS 1E
• Inform and persuade audience about a topic
• Tool to teach Information Literacy
• Tool to teach in any discipline using data from reference sources and databanks
• Create worksheets
SAMR Smash
Using SAMR & Blooms’ Taxonomy to Integrate iPads in the Classroom

1. SAM - Substitution
   - Remembering
2. Augmentation
   - Understanding
3. Modification
   - Applying
4. Redefinition
   - Analyzing, Evaluating, Creating

Substitution - Remembering & Understanding

- Apps
  - Google, Facebook, Instagram, Twitter
  - YouTube, Quizlet, Kahoot, Quizata

Augmentation - Applying & Analyzing

- Apps
  - Minecraft, Pokemon, Twitter, Instagram

Modification - Analyzing & Evaluating

- Apps
  - Photoshop,漳, Powerpoint, Prezi

Redefinition - Evaluating & Creating

- Apps
  - Weebly, Wix, Quizlet, Kahoot

Sample Verb Lists:
- **Substitution**
  - Google, Facebook, Instagram, Twitter
- **Augmentation**
  - Minecraft, Pokemon, Twitter, Instagram
- **Modification**
  - Photoshop,漳, Powerpoint, Prezi
- **Redefinition**
  - Weebly, Wix, Quizlet, Kahoot

GET CONNECTED!

- Blog your learning
- Connect on Twitter
- ripad
- edtech
- #iappppe
- #approach

Pictogram: "Make information beautiful"
Infographics as a Learning Tool

• Preparation
• Data Sources
• Rubrics
• Citing Sources
Citing Sources

- Hyperlink
- Paraphrase
- Direct quote
- Image
Questions?
References

• Designmantic
  http://www.designmantic.com/blog/infographics/ten-commandments-of-typography/
• Global Terrorism Database
  http://terror.periscopic.com/
• Google Images
  http://images.google.com/
• Pew Research Center
• Retale in-Real Time
  http://www.retale.com/info/retail-in-real-time/
• Samuel C. Williams Library
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