



Infographics: Communicating Information Visually

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After this class, you will be able to....

- recognize the **usefulness** of infographics
- **choose** an infographic creation tool appropriate for your goals
- **plan and design** an infographic
- find **resources** for creating infographics
- **produce** an infographic

What are infographics?

- “a visual image such as a chart or diagram used to represent information or data in an easily understandable form” (OED)

Infographics vs Data Visualizations

Infographics

- Tell or explain a specific story
- Subjective
- Self-contained and discrete
- Illustrations and icons
- Information does not have to be quantifiable

Data Visualization

- Information is quantifiable
- Objective
- Transparent
- Data sets
- Generated automatically

Using visualizations can

- Reduce cognitive burden¹
- Increase trustworthiness¹
- Enable audience to recall more information²
- Cause more favorable attitude changes²

1. Egan, M., Acharya, A., Sounderajah, V. et al. *Evaluating the effect of infographics on public recall, sentiment and willingness to use face masks during the COVID-19 pandemic: a randomised internet-based questionnaire study. BMC Public Health* 21, 367 (2021).

2. Lee, N., & Lee, S. (2022). *Visualizing science: The impact of infographics on free recall, elaboration, and attitude change for genetically modified foods news. Public Understanding of Science*, 31(2), 168–178.

How should we communicate with our audience about telemedicine?

- Example 1: Table
- Example 2: Executive summary
- Example 3: Chart
- Example 4: Infographic

Why am I creating an infographic?

- Begin with a rough outline or storyboard
 - What information do you want to convey?
 - Tell a story to create flow
 - Answer an interesting question
- Use focused, relevant data
 - Check your facts and cite your sources
- Consider your target audience

Brainstorm: Infographic ideas

- Medical librarians and evidence based medicine
- Purpose = market the library
- Audience = clinical faculty
- Story = a time when librarians made EBM easier, etc

Brainstorm: Background information

- Data from HSLS?
- Checked PubMed for research or data

Evaluating the impact of clinical librarians on clinical questions during inpatient rounds (Brian 2018)

“Rounds with a CL (CLR) were associated with significantly increased median number of questions asked (5 questions CLR vs. 3 NCLR; $p < 0.01$) and answered (3 CLR vs. 2 NCLR; $p < 0.01$) compared to rounds without a CL (NCLR). CLR were also associated with increased mean time spent asking (1.39 minutes CLR vs. 0.52 NCLR; $p < 0.01$) and answering (2.15 minutes CLR vs. 1.05 NCLR; $p = 0.02$) questions.”

What do I want my infographic to look like?

Design principles

Minimize text

Format

Clear, not misleading

Graphic design reminders

- Layout
 - Logical order (reading order)
 - How will this be viewed? (poster, desktop, mobile)
 - Convey meaning (hierarchy, large vs small)
- Color
 - Use 1-2 main colors, 1 accent color
 - Contrast - [Accessibility checker](#) (use eyedropper)
 - Meaning
 - Ex warm colors for warnings
 - Use transparency to highlight

Brainstorm: Layout

- Include data – a chart?
- Match HSLs/Pitt color schemes
- One page (flyer)

Tools

- Traditional design software
 - Powerpoint
 - Microsoft Publisher
 - Adobe Illustrator

Tools (2)

- Drag-and-drop creators
 - Piktochart
 - Infogr.am
 - Easel.ly
 - Venngage
 - Canva
 - Gliffy

Tools (3)

- Downloadable Editors
 - Tableau Public
- Others
 - Gliffy
 - Wordle
 - Tagxedo

Choosing a tool

- Are you already familiar with design software?
- Do the available design options fit your needs?
- What kind of data do you have and how will you need to work with it?
- What will you do with the finished product?

Piktochart

- Drag-and-drop infographic creator
- Many design options
- Free or paid

Piktochart

Creating your infographic

1. Come up with an idea – your purpose and audience
2. Research your content – make sure your idea is unique, gather statistics and data
3. Edit – focus and synthesize
4. Outline – layout and organization
5. Draft – graphics, visuals, design principles
6. Review and refine
7. Share – optimize for target platforms

Accessibility

- Visual impairments
- Challenge for screen readers
- [Piktochart accessibility statement](#)
- [Piktochart Inclusive Design](#)
- [Voluntary Product Accessibility Template \(VPAT\)](#)

Images

- [HSLS Images LibGuide](#)
 - Permissions
 - Creative Commons
 - Free images:
 - [Pexels](#)
 - [Unsplash](#)

Further Reading

- [Alberto Cairo \(data journalism, blog\)](#)
- [Style Guides \(Policyviz\)](#)
- [Design and Make Infographics \(Project-Centered Course\)](#)
- LinkedIn Learning, for example [Learning Infographic Design](#)
- [Piktochart Design Series](#)
- Infographics: A Practical Guide for Librarians (Crane 2018)
- [Fast Company Infographic of the Day](#)

Books in PittCat

- Lankow, Ritchie. [Infographics: The Power of Visual Story Telling](#). WILEY, 2012. eBook.
- Mauldin, Sarah K. C. [Data Visualizations and Infographics](#). Lanham: Rowman & Littlefield, 2015. Print.
- Smiciklas, Mark. [The Power of Infographics Using Pictures to Communicate and Connect with Your Audiences](#). 1st edition. Indianapolis, Ind: Que Pub., 2012. eBook.

HSL Self-Paced Modules

- HSL Self-Paced Learning: **Infographics: Communicating Information Visually**
 - [Access instructions for Canvas module](#)
- While you're there, check out:
 - Choosing a Citation Manager
 - Identifying and Combating Health Misinformation
 - Visual Health Misinformation
 - EndNote: Getting Started
- Coming soon: Graphic Design with Canva

Tips and Tricks

- Spend a lot of time looking at different infographics for ideas and inspiration.
- Look for ways an infographic would be an improvement over the status quo.
- Play around with multiple tools.

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