



# Designing with Data

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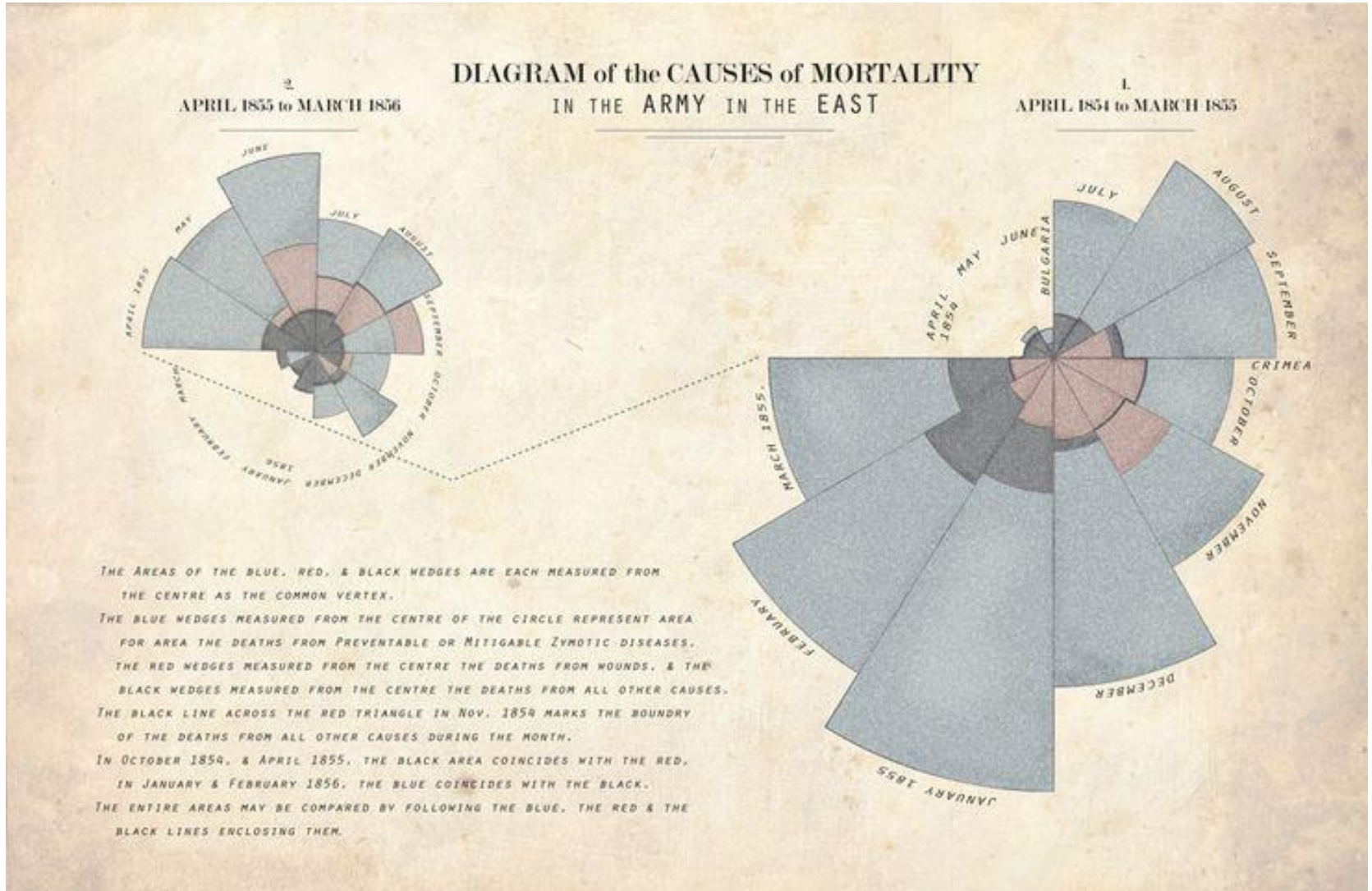
## DESIGNING WITH DATA

*“Creativity is not a talent.  
It is a way of operating.”  
– John Cleese*





# DESIGNING WITH DATA





# DESIGNING WITH DATA: TODAY'S PRESENTATION

- Overview of Ingenuity's data systems
- Tour of Ingenuity's new *artlook* Map
- Data Design Framework
- Practice designing with data
- Report Out
- Q&A



# INGENUITY'S DATA SYSTEMS: THE CALL FOR MORE DATA

CHICAGO ARTS LEARNING INITIATIVE



# artlook



Data Collection



Data Dissemination



# DATA DESIGN FRAMEWORK

## DATA DESIGN FRAMEWORK



Ingenuity's Data Design Framework provides an architecture for using data in order to answer questions, solve problems, design programs, and ultimately create something valuable. Engaging in this process is about accepting a habit of mind that will allow one to think analytically and creatively about their arts education programs. Data cannot be approached blindly; one must have a plan that provides a continuous point of reference. We encourage you and your team to let Ingenuity's Data Design Framework serve as inspiration and guidance as you engage in a design process that works for you.

## Objective

Apply the Data Design Framework to your own work.

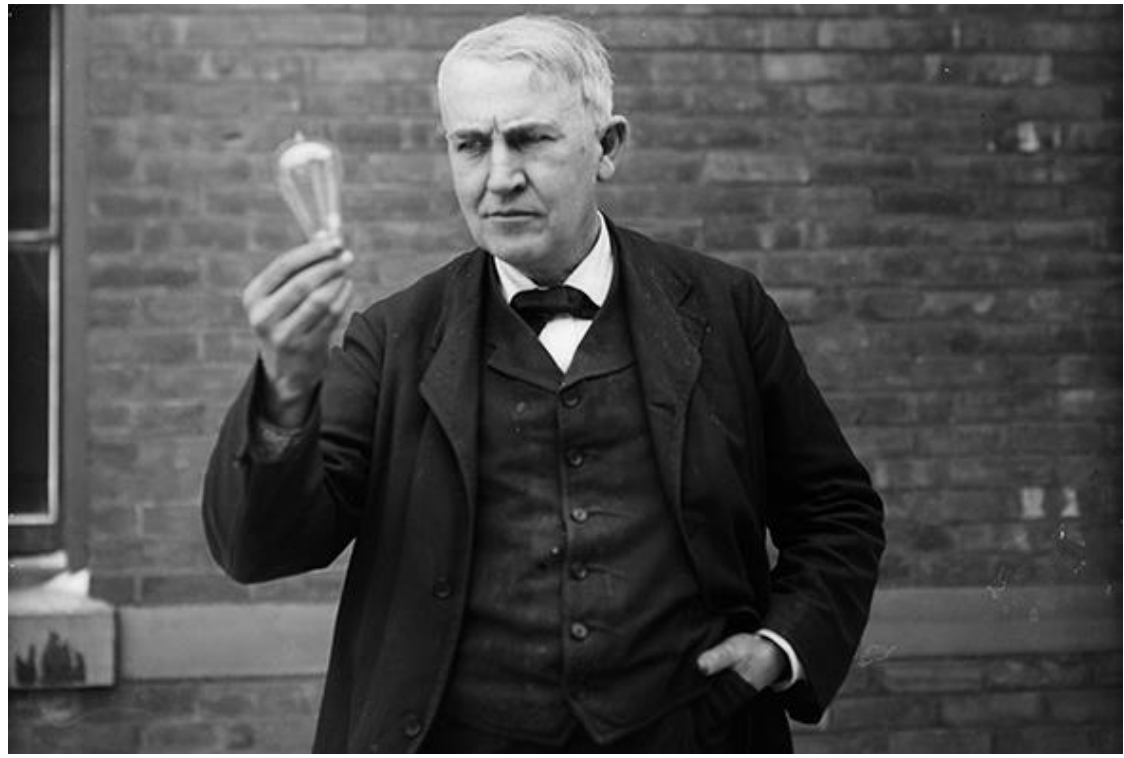


# DATA DESIGN FRAMEWORK

Use the Framework to...

- answer questions, solve problems, design programs, and ultimately create something valuable
- establish a habit of mind
- think analytically and creatively
- provide a continuous point of reference

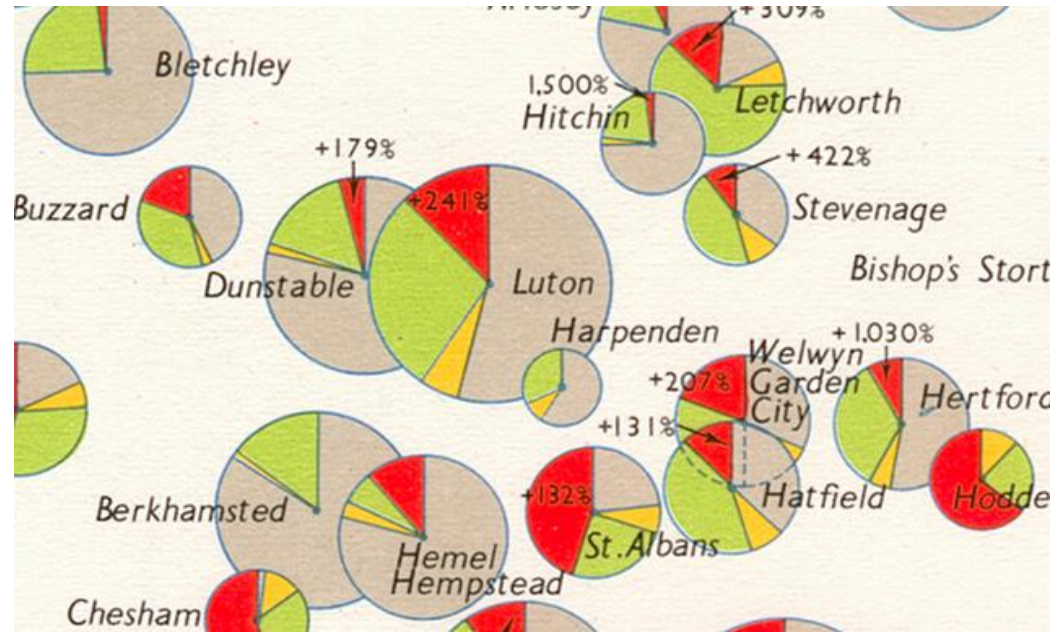
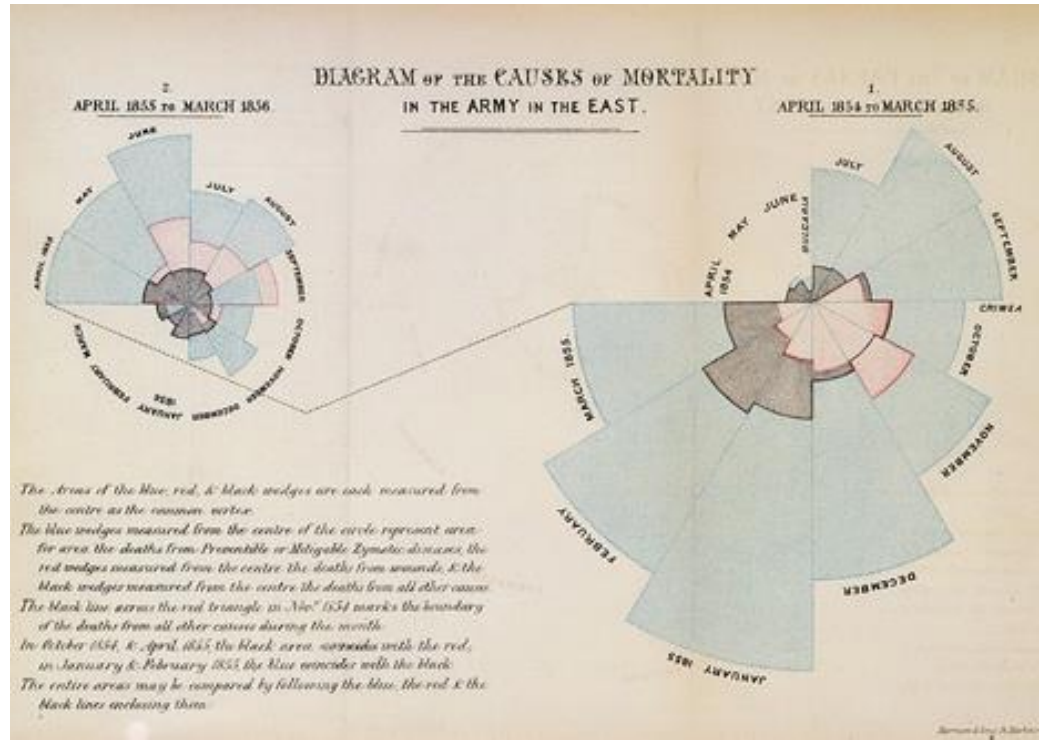






# BRAD PITT MONEYBALL

$$\begin{aligned}
 & \left[ \frac{1}{\left(1 - \frac{v^2}{c^2}\right)^{3/2}} + \frac{v^2}{c^2} \cdot \frac{1}{\left(1 - \frac{v^2}{c^2}\right)^{3/2}} \right], \quad \alpha = 1 - \frac{v^2}{c^2} \\
 & \left[ \frac{1}{\left(1 - \frac{v^2}{c^2}\right)^{3/2}} \right], \quad W = \int F dx = \\
 & 1 - \frac{v^2}{c^2} \Rightarrow W = m_0 \left[ \frac{c^2}{-2} \int \frac{du}{u^{3/2}} \right] = \\
 & \Rightarrow W = m_0 c^2
 \end{aligned}$$





# DATA DESIGN EXERCISE

## 1. Brainstorm

- a) What does your organization wish to accomplish?
- b) What can be done to address this?

## 2. Define Your Project/Study

- a) Use the Project Statement Formula

## 3. Data Acquisition

- a) Make a list of the data you will need and map out where to find them
- b) Explore the data resources



# DATA RESOURCES

- artlook Map
  - [beta.artlookmap.com](http://beta.artlookmap.com)
- CPS Schools Data
  - Raw data files:
    - [cps.edu/schooldata/pages/schooldata.aspx](http://cps.edu/schooldata/pages/schooldata.aspx)
  - Individual school profiles:
    - [cps.edu/schools/find\\_a\\_school/pages/findaschool.aspx](http://cps.edu/schools/find_a_school/pages/findaschool.aspx)
- City of Chicago Data Portal
  - [data.cityofchicago.org](http://data.cityofchicago.org)
- Census Data
  - [socialexplorer.com](http://socialexplorer.com)
  - [factfinder.census.gov](http://factfinder.census.gov)
  - [census.ire.org](http://census.ire.org) (2010 decennial census)