Information Design Project

Pacing: 3 Weeks
Percentage Weight of Final Grade: 15-20%

Project Goals

- Gain a better understanding of document design and visualizations
- Write based on a specific purpose and audience
- Create appropriate visuals from numeric data
- Use visuals to support a specific point or argument
- Analyze visuals to integrate data into an argument
- Apply principles of design to create a visually appealing, readable document

Description

This project asks students to engage with data, present data for a specific audience, and practice making effective data visualizations. Discussions/exercises can address the fair, accurate, and ethical use of data, the conventions of writing with numbers and data, how to integrate figures into a document, and how to design effective visualizations. Audience and purpose are central to the goal of the final deliverable, as students should realize that numbers don't speak for themselves, that writing with data requires critical and rhetorical thought, as well as visual design skills.

In completing the project, students will work with instructors to engage with different types of visuals, as well as the conventions of writing with data and numbers. They will select a data set of their own to work with, choose a point to make using their data that will matter to their target audience, make decisions about which data to visualize from the larger data set, and craft that data into a final deliverable of one page that includes three visuals and the text necessary to explain their data and make their point. Students also will compose a reflective memo that explains their choices and goals, and how the final deliverable achieves them.

In addition to the textbook chapter on Design, you may which to use this Periodic Table of Visualization Methods to expose students to various types and uses of visuals.

Additionally, see the Information Design Supplemental Resources for some tools to design data visualizations, and some resources for finding data sets with which the students can work.

You may wish to share the following text with your students as part of your project description:

Data visualizations bring a number of benefits to any professional document, even short ones:

- Though they have become extremely easy to make, **people in the workplace still tend to be impressed** by the extra effort and thoughtful presentation implicit in making a visualization.
- Data visualizations also help to **make the work of digesting and interpreting data more efficient** by displaying trends or illustrating the significance of specific information without poring over page after page of numbers.
- Because of this efficiency, visual elements are also **better at communicating certain ideas more quickly than words or tabular data**. Something that may take many sentences to communicate, a sudden drop in the efficiency of a process, or a surge in sales among a certain demographic, are instantly recognizable as spikes or dips along the X axis of a line graph.

For this project, you will find a data set and create a short informational report that includes at least three data visualizations that you feel best communicates that data in a form that maximizes the impact of the data to suit a specific audience and purpose.

For example:
This short report from the [Department of Education](#) provides an overview of literacy and numeracy for men and women. In this online short report, the authors created two bar charts that are designed to show relationships between data and then they briefly explain the importance of the data.

Deliverables

- Visual Report
  A one-page, informative, visually interesting report that provides a broad overview of your subject. This report should incorporate at **three types of visuals** along with a discussion/analysis of the data in your figures. The text included should introduce the topic and its importance, explain the meaning of the visuals, and to point to the conclusions suggested by the data. Students should think through and identify a clear audience. The analysis of the audience informs how the data is presented, the form the visualizations take, and the point students use the data to make, as well as the overall overall purpose of the document.

- A Memo to the Instructor
  A short 250- to 500-word memo that explains what students' overall goals were in presenting information about this topic, how they selected which data to visualize (since not all the data could be represented in the report), how they tailored the report to their target audience, and how they ensured that the visualizations of the data were fair, accurate, and clear.

- The raw data set used to create the report (with a citation for the data)