CSC/SDS 109: Communicating with Data

HW 04: Data Stories

This is a pair assignment! Individual submissions must be pre-approved.

Goals:

- Build a storytelling visualization
- Use Tableau Public to share your visualization

Instructions

Choose a Topic and Dataset

Spend a few minutes thinking about a real-world issue that is important to you. You may want to start with a quick written reflection on this issue or talk with a friend about it. Try to pick something that you feel invested in - this will make for a more compelling story in the end!

For example: if Ab was working on this assignment, they might think about the history of women's running in the US (they love running). How has the landscape of women's running evolved? What people, institutions, laws, etc. have impacted women's running?

Once you have found a topic you feel invested in, look for datasets that will help you tell a good story about that topic. It may be that you don't find a perfect match between a dataset and the questions or themes that came up in your initial reflection - that's okay! The ideas you explore may evolve based on the data and supplemental information you have available.

Be sure to read any documentation about your datasets to make sure that you understand what each dimension or measure contains, as well as any information about the history (or "provenance") of the data - who collected it, when, and why? As before, you are free to use any dataset(s) you want.

For example: Ab might decide to focus on Boston Marathon finisher data, and would (at a minimum) read about the history of the Boston Marathon. They would need to do significant data cleaning on the finisher data.

Now that you have identified your data sources, it's time to create a storytelling visualization. Start by exploring your data and choosing the "point" of your story. Then, design visualizations that guide a reader to that "point". You may want to start by sketching the visualizations you want to make before you start implementing them, rather than letting Tableau drive your design choices.

For example: Ab might decide they want to show how the number of women finishers increases over time and how Title IX effected that number. They might sketch a linechart showing year on the x-axis, number of women finishing the Boston Marathon on the y-axis, and a vertical line marking the year Title XI went into effect. Maybe they later decide it's more important to see the proportion of finishers who are women, to separate out the effect of increased overall participation in the marathon, so they modify their sketch to show proportion of finishers who are women on the y-axis. Ab will repeat this process several times, making a series of visualizations that create a story about the Boston Marathon data.

Organize your visualizations into a story on Tableau. Think about what **visualization storytelling genre** makes the most sense for your story. Consider using captions, annotations, filters, or other techniques to provide context and guide the audience's attention. **You must use at least 2 visual narrative tactics**. You might find that you do not need to include all the visualizations you sketched in your story - some of them might serve as part of your own exploratory process, but not make that "final cut" into the story itself--this is fine! **You need a minimum of 3 different visualizations in your story.**

To complete this assignment, please publish your workbook to Tableau Public. Instructions are on the course website under "In-class".

On Gradescope, submit a link to your story on Tableau Public and fill out the attached worksheet.

Submission

Submit your deliverable(s) as a PDF on Gradescope. If you worked with a partner, submit as a group (https://guides.gradescope.com/hc/en-us/articles/21863861823373-Adding-Group-Members-to-a-Submission).

Rubric

The following matches the rubric you will see on Gradescope.

	Points	Criteria
Each visualization	1	Follows design guidelines
	1	Descriptive title
	1	Readable axis titles
	1	Readable axis labels
	1	Legend if necessary
Story as a whole	1	Link to story
	2	At least 2 visual narrative tactics
	2	At least 3 different visualizations
Design justification	2	"Point" clearly articulated
	2	Genre identified and supported with evidence
	2	Visual narrative tactics used and well-reasoned
	2	Narrative structure identified and well-reasoned
	2	Narrative structure identified and well-reasoned
TOTAL	30	

SDS/CSC 109 hw04 Worksheet

Fill out this worksheet for your storytelling visualization.

What is the *"point"* **of your story? Why did you choose it?**

What *genre(s)* **of narrative visualization does your story fall under? Explain why.**

What *visual narrative tactics* **did you use? Explain why.**

What is the *narrative structure* **of your story? Why did you choose that structure?**