Problem-Solving, Collaboration, and Sad Charts

K Arnold, based on DSBox

Problem-Solving

- **Understand your data**: at the *input* and at *each step* in a pipeline.
  - Read the first row out loud. What does it say?
  - How many rows are there? What does each row represent?
- **Think about your goal**
  - What should the first row of my output be?
  - If I had to work out each value in that row by hand, what parts of the input would I need?
- **Take small steps**
  - Look at the results after each step
  - Work out your computation for one datum first, then go to all of them.

Data science is **not magic**. Deliberate application of concepts and strategies will (eventually) bear fruit, no matter what language / library.

Cooperation vs Collaboration

"It is also important for the teams to understand the difference between cooperation and collaboration.

- *Cooperation* is where the multiple tasks of a project are divided among the team members, but each person works independently.
- *Collaboration* is the process where the finished product is produced via interactions among all of the members of the group working together

True training in teamwork will come from collaboration, not cooperation."

Ekblaw. Effective Use Of Group Projects In Online Learning. Contemporary Issues in Education Research. 2016

Where we are

- We visualized. We wrangled. Now we'll get more practice bringing those together.
- Some VoiceThread notes published, more coming.
- Next week: start predictive modeling

This week: replicate and critique visuals

- Lab 5 (starting today): critique a vis we give.
- Discussion 3: critique a vis you find
- Quiz 5 on Thursday: no more infinite tries.