PISA 2012

- ≠ 65 countries, between 100-1500 schools in each
- ✓ Student questionnaires about their environment (635 vars)
- ✓ Parents surveyed on work, life, income (143 vars)
- ✓ Principals provide information about their schools (291 vars)

http://www.oecd.org/pisa/pisaproducts/datavisualizationcontest.htm

Statistics 503, Spring 2015, ISU

Brainstorming

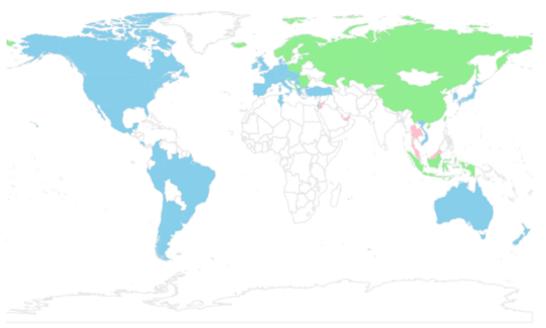
- ★ shared whiteboard: <a href="https://example.com/https:
- Computed combined possessions score
- Age at start school

- ≠ ...

Colombia Chile Costa Rica Luxemboura Liechtenstein Austria Peru Japan -Italy Brazil -South Korea Ireland -Spain Hong Kong Argentina Tunisia -Germany Denmark -Mexico -Turkey New Zealand Uruguay Israel United Kingdom Portugal Hungary Czech Republic Croatia Serbia Switzerland Australia France USA Vietnam Slovakia Netherlands Canada Greece Belgium Taiwan Estonia Norway Indonesia Poland Romania China Slovenia Montenegro Albania Finland Kazakhstan Russia Lithuania Bulgaria Sweden Latvia Singapore Iceland · United Arab Emirates Malaysia Thailand Qatar Jordan 15 -20 Math Score Gap Significant | female | male | none

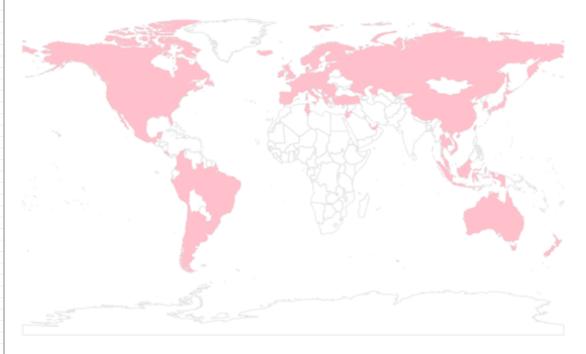
Math

- 1. Compute weighted means by country and by gender.
- 2. Show mean difference by country
- 3. t-test of difference (unadjusted)



Albania -Colombia -Peru -Chile Japan -Costa Rica South Korea Mexico -United Kingdom Hong Kong -Liechtenstein -USA · Indonesia Netherlands -Brazil Ireland Spain -China -Luxembourg -Vietnam · Denmark -Belgium · Tunisia Taiwan -Singapore -Australia Argentina -New Zealand -Uruguay -Hungary · Austria -Switzerland -Canada -Kazakhstan -Czech Republic -Italy Russia -Malaysia Portugal Romania Slovakia Israel Turkey Poland Germany France Estonia Norway Serbia Croatia Sweden -Greece Latvia -Iceland -Thailand · Lithuania Finland United Arab Emirates Montenegro Slovenia Bulgaria Qatar -Jordan --40 Reading Score Gap -20

Reading



Your Turn

Brainstorm with your neighbors what might be interesting questions to pursue on the data.

Two csv files have variable description dictionaries, two R data files to load.

Make one table, and one picture to answer your question.