

# Teaching Resources

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## Online Resources for Teaching Statistics

Website with materials from today's session: <https://mdbeckman.github.io/PSU-Grad-Orientation/>

### General Resources

#### **Guidelines for Assessment and Instruction in Statistics Education (GAISE)**

2016 GAISE College Report: <http://www.amstat.org/education/gaise>

*Recommended best practices for Statistics Education. Short description of 6 recommendations accompanied by concrete implementation strategies, sample resources, references, etc.*

#### **Consortium for the Advancement of Undergraduate Statistics Education (CAUSE)**

<http://www.causeweb.org> (Now hosted by Penn State!)

*The resources tab provides lots of useful materials sorted by topic, such as applets, cartoons, powerpoint slides, tutorials, data, suggested interactive activities, and more.*

#### **ASA's Collection of Useful Links**

<https://www.amstat.org/education/resourcesforundergradteachers.cfm>

*Useful links for undergraduate teachers of statistics. Clicking on "Useful Web Sites for Teachers" will bring up many more useful links.*

### Data Repositories

#### **Chance News Wiki:**

[http://test.causeweb.org/wiki/chance/index.php/Main\\_Page](http://test.causeweb.org/wiki/chance/index.php/Main_Page)

*Reviews current stories in the news that involve probability or statistical concepts.*

#### **Chance Magazine's "Taking a Chance in the Classroom"**

<http://chance.amstat.org/category/columns/taking-a-chance-in-the-classroom/>

*Datasets and corresponding papers with suggestions classroom use. ASA login required.*

#### **Journal of Statistics Education Data Archive**

[http://www.amstat.org/publications/jse/jse\\_data\\_archive.htm](http://www.amstat.org/publications/jse/jse_data_archive.htm)

*More data, although not sorted by statistical topic so a bit harder to find appropriate data.*

**Robin Lock's Website:**

<http://it.stlawu.edu/~rlock/maa51/data.html>

*Links to other data sources*

**Data and Story Library (DASL)**

<http://lib.stat.cmu.edu/DASL/>

*Lots of real data, searchable by real-world topic or statistical method.*

**StatLib – Datasets Archive**

<http://lib.stat.cmu.edu/datasets/>

*One of the original sources for archived data*

**Lots more...**

<https://data.cityofnewyork.us/>

<https://github.com/fivethirtyeight/data>

<http://www.datasciencecentral.com/profiles/blogs/great-github-list-of-public-data-sets>

<http://www.icpsr.umich.edu/icpsrweb/ICPSR/>

<https://www.springboard.com/blog/free-public-data-sets-data-science-project/>

<https://www.dataquest.io/blog/free-datasets-for-projects/>

Even more... (link)

**Applets****Lock<sup>5</sup> StatKey**

<http://www.lock5stat.com/statkey>

*Sampling distributions, bootstrapping, randomization tests, theoretical distribution “tables”*

**onlinestatbook.com**

[http://onlinestatbook.com/stat\\_sim/index.html](http://onlinestatbook.com/stat_sim/index.html)

*Lots of applets, all searchable by statistical topic.*

**Rossman and Chance Applets**

<http://www.rossmanchance.com/applets/>

*Website for applets, many of which coincide with interactive activities.*