Recommendation 1: Use Real Data

Reflection 1: Televisions, Physicians, and Life expectancy

This article is a great introduction for the student to be able to get an example of how your mind is not a good estimator. This article is another way for real data in the classroom. Here the students are given data to make a line of regression and how causation is not directly associated to correlation. Too we can use this data to show students that not all data presented should be accepted but investigated. One could produce data that seems to be correlated but has no connection.

The start of the article Rossman has students guess of the list given which country has the highest life expectance and the amount of televisions per person. This way of presenting data is a great way to have the students see that guessing in statistics is a very bad way to approach a problem. Later in the lesson we prove that most people were close to being correct but however some surprises appear.

In the article the students are given real data, to show that correlation does not prove causation. We are given the years for life expectance in each country that we are observing, and then we are given that amount of TVs that are per person in each country. We can draw a conclusion from this that the regression is decent but we will not be able to correlate that the two variables cause one another to change. That is, if we put more TVs in a country we will have a higher life expectancy. There fore a correlation does not provide causation

Later in the exercise we think something more practical will work, that is a higher number of physicians will create a higher life expectancy. We do the same process as above and retrieve a similar correlation. Does this mean if we add more physicians we will have higher life expectance? Are we able to show that a higher number will live longer? Or does this correlation play along the same lines as TVs?

This assignment will be brought into my classroom if not in another way. I think that having students use this real data to make observation is very important in statistics. Rossman has done a great job at showing how to use real data in the classroom that inspires me to bring more real data, such as height, eye color, and family sizes already done for the students or have the students create.