Jakab-Muller_Kelly_Data

Week 6 Assignment- Data Sets

For the past several years, my classes have participated in a Citizen Science project called, **A Day in the Life of the Hudson River** https://www.ldeo.columbia.edu/edu/k12/snapshotday/index.html . On one day a year in October, participants collect samples all along the Hudson River. The data is collated and uploaded for researchers to study everything from the tides, salinity, fish species, turbidity, pH, etc. I really enjoy taking the city kids down to the river, which is literally outside the schoolhouse doors, to learn about their local environment and take pride in participating in meaningful data collection. They are assisting in creating the data sets https://www.ldeo.columbia.edu/edu/k12/snapshotday/Data.html that get used by future students and scientists.

There are several ways to use this data to enhance my lessons. When teaching living environment, I typically focus on the fish species. We look at past data to get an idea of which species were the most and least abundant so that we can compare that data to our own collections for the current year. We can then talk about what other environmental factors may have led to the increases or decreases in species. The students get really involved in data analysis, particularly because their data will be added to the website and used by others. In earth science, we can discuss the weather patterns, climate trends, and even the formation of the Palisades themselves. In chemistry, which I don't teach, there is plenty of data for learning about water salinity and pH.

One of the newer features that I really like on the website are the interactive databases, where students can pick a river, a species or event and a particular year to view and compare the data trends. http://app.ldeo-grg.org:8080/riverlife/chartsAlongRiver.xhtml

I really like using this data source because it helps students understand the connections between the sciences. There is data about weather, about the water itself and about the local species. You can literally learn about biology, earth science and chemistry all at once.

A great interdisciplinary activity that would connect to this data would be to do some research about the history of the Hudson River. Yonkers, NY has a lot of historic significance that I'm not even fully familiar with, and using the Hudson River data as a starting point to learn more about this history of Yonkers itself is a great way to get students involved in their community's past, present and future.