

Data Source: http://datanuggets.org/?fbclid=IwAR1S73Xt1pNG_Zm4NfkB-9vSNWLJE4Bebj2QOuZj-ja4DyhPU5U8G_MDY%2014

2. Components of the assignment:

a) Data source: Growing energy: comparing biofuel crop biomass

http://datanuggets.org/wp-content/uploads/2020/01/Growing-Energy_StudentC.pdf

b) Lesson Enhancement:

In the classroom, I feel that using data enhances the topic you are teaching by making it a concrete issue that students feel they are solving the problems of the world. Currently, we are starting a unit over probability using a collected data source and developing probability based on it. Using real data makes students more engaged in the topic. In this lesson, students are studying biofuel to determine if any perennial crops a good alternative to corn for biofuel production and if the location affects the outcome? The math in this lesson would include that students have to graph the data, determine any changes, differences, or trends. Then site evidence that supports their claims. I would take it a step further to incorporate probability by asking what's the probability that crops grow better in Wisconsin than in Michigan. What's the probability that

c) Interdisciplinary context:

Since I teach math using data makes it very easy to incorporate other disciplines into the classroom. In this lesson, students use science to think about biofuel and agriculture/ horticulture principles to think about the process in which the data is collected and what types of errors could occur making the standard deviation large. This type of lesson brings attraction to students who may never pay attention in class because they are thinking about their farm, animals, crops and everything they have to do when they get home. That makes their experience and interest important for the days' discussion and lesson. I try to use farming examples a lot in class because I live in a rural area in which most students work on farms or live on farms so they can relate and may have experienced issues that might arise. Instead of using examples about a beach because living in Kentucky low-income students have rarely experienced a beach or know what issues could arise there. I feel that maths makes it very easy to include other disciplines to make mathematical concepts more concrete and real world. We can always pull examples from science, history, art, literature, etc. to use math to solve problems. My favorite math quote is "At the bottom of everything is math" and I take that to heart in my lessons.