For our class assignment, Authentic Data Integration, I'm creating a lesson called, "Run, Tilly, Run." The source of my data comes from a hedgehog named Tilly at http://tilly.run/. This website was set up by my husband's daughter and son-in-law. The background on this unusual story is that they could hear their nocturnal animal running on her wheel all night and noticed it would wake them up. They started to wonder if there was some way to find out how far she was travelling. So they created a website that would keep track of all the data received from a tiny odometer. Since its creation, I have been waiting for the opportunity to use it with my students and it is finally here.

In fourth grade math, we are beginning our measurement and data unit. Students have just finished decimals and Tilly's stats are recorded in decimal units. This is a perfect connection to building on prior knowledge. I'm excited to take it even further though as we will be converting between metric and customary, as well as, make and interpret line plots with fractional data. This is going to change the learning in so many ways. As students arrive, they will be excited to see the new stats from the previous evening. The positive student affect first thing in the morning will undoubtedly carryover straight into math class. Additionally, hedgehogs are cute and curious critters that not many kids have interactions with outside of an animated movie. This will give opportunity to enhance learning and investigation about this spiny mammal. Other opportunities for it to integrate across the disciplines is to carry it over to our science units on energy and force and simple machines. The engineering design model is brilliantly demonstrated here in that regular people noticed and wondered. They had a question. Then, regular people took that question and through trial and error, found a solution. Now, regular people like us can benefit from their inquiry mathematically. It can be a tangible example for students to see that they can be regular people with questions that can find solutions.

Data in the classroom is vital. Whether it be recording something in their science notebooks or keeping track of how many Panther Paws they have accumulated for the week, data shows students numbers and patterns. It allows for correction and goal setting. Some of my favorite lessons are

when students have giant pieces of butcher paper and information that they need to convert into shareable data. Additionally, I also use data. We are a data-driven school and I use it to form lessons and small groups. I use it with my teaching partner to see what we are teaching well and where we need to adjust. Without the collection of information, whether done by me or by the students, I believe that our learning would be without direction.