Third Grade Weather with BloomSky

By Joanie Craddock June 29, 2020

The data source I have chosen to use for this assignment is https://www.bloomsky.com/. BloomSky is a company that began through Kickstarter. The app shares weather information from all over the country and some other parts of the world. We were lucky enough to have a parent install a device on the roof of our school. It is an authentic example of utilizing a community to share information. Our device is no longer working and the parent who donated it has moved away but anyone can access the data so we are still able to use the site.

In our third grade Earth and Space Science NGSS unit, one of our lessons requires students to record weather information for five days. This objective could be addressed by simply looking at the weather report on the news, in the newspaper, or using the weather app on a phone. Instead, we can stretch the lesson out to two weeks. Using the BloomSky map, students record the weather from three different places. The first is our area done together as a whole class. Second, students are assigned a partner to pick a data point to record together. Finally, students independently choose an additional spot on the map to monitor. The timelapse video is a great way to observe the change in temperature and watch clouds travel across the sky throughout a day. It is also a quick and fun way to see what the weather looks like across the country. Students can easily find information on temperature, humidity, air pressure, wind speed, and precipitation. After two weeks, students use the data to create a graph of weather patterns in all three places. Doing your own school allows the teacher to model the procedure as a whole class. Students transfer the knowledge with their partner and on their own for the other locations. It is a gradual release that scaffolds the procedure for all students.

In my opinion, using real world data is a great way to engage students in learning about the weather. For me, it is one of the most abstract topics that I have always struggled to understand. Using numbers that I have no connection to does not get me more excited about the topic. Being able to compare my weather to my cousin's house or to a place I've always wanted to see makes it much more interesting. I think students will feel the same with the addition of choice for two of the locations.

Adding BloomSky observations to the unit about the weather is a great way to integrate STEM into the science curriculum. You are obviously incorporating technology and promoting the fact that crowdsourcing is a wonderful benefit of our world. I do not see a clear connection with engineering although the unit could be expanded build a structure for shade or wind protection in your area of choice. Mathematics is an easy connection through graphing. It is also possible to extend the unit to add social studies concepts if studying a particular country. Depending on how much time you have, you could also add some art to the unit.