

Current Events - Brooke Petrucelli

As a technology teacher and not with the students on a regular basis, I would share my current event news feeds. This way I have some control over the type of current events and media exposure that the students are seeing. The reason for this is that some news, as we all know, can be devastating. If I am requiring them to bring in current events, I don't feel that my short time directly with the students is enough to monitor all misconceptions, or fears. With some of my older grades, I would consider having them bring in the current events that they are viewing.

I do enjoy working with students on a current event. I have news feeds that are continually updating me on scientific news. That is what I would deem appropriate for my position. I often have had my science news feeds pop up during a lesson on screen and some can immediately spark interest, discussion and research. When this has happened students have often gone home with this information and can share with their family. It builds a great home to school bond and student engagement increases. They understand that it is affecting someone right now and not a historical event.

There is also a cross curricular connection with scientific current events. While we were studying Italy last year for social studies, some students were assigned to study the history of Pompeii. They were able to share with the class the similarities of the ancient people of Pompeii and Vesuvius with Hawaii of today. It was a great example of connecting an ancient event with a current event.

Educators are always trying to make the real world connection to our lessons. Current events like the ones I have on my news feeds are the real world connections. One of the best things about the news feeds is that the students make the connections themselves, I just have to guide them.

This last year, one of my students vacationed in Hawaii just before the volcano started erupting. As news of it was popping up on my feeds, and students had also heard about it at home, many of the students felt a connection as their peer had just been there.

I use news feeds from: National Geographic, NASA, LiveScience and Science Daily.

<https://www.nasa.gov/content/nasa-rss-feeds>

<https://news.nationalgeographic.com/news/misc/rss.html.20070911>

<https://www.livescience.com/>

<https://www.sciencedaily.com/news/top/environment/>

The first of my three current event articles came from the LiveScience Feed. It would be perfect for 4th grade and up.

Title: How Much Trash Is on Mount Everest?

(<https://www.livescience.com/63061-how-much-trash-mount-everest.html>)

The article gives specifics of of Mount Everest and how it was formed by the 'Indian subcontinent crashing into the Tibetan plateau 40 million to 50 million years ago' . (Hickok, 2018). There is also a fabulous link to the USGS and information about how the Himalayas were formed. (<https://pubs.usgs.gov/gip/dynamic/himalaya.html>).

The article focuses on the problem with people traveling and climbing up Mt. Everest and leaving all types of trash - plastic, ropes, canisters, food packaging and poop. One of the problems is that when people hike the mountain, they can barely get themselves off the mountain due to lack of oxygen and they end up just discarding their trash. Unlike other popular mountains, Denali was mentioned, they have strict policies regarding trash for those who hike the mountain. Everest doesn't have anything like that. Huge trash piles are forming. Some local people have been burning the trash but that releases toxins into the environment and water supply. Human waste is also an issue. It gets collected in barrels and is dumped into areas where the monsoon rain washes it down into villages. This creates more problems with the local water supply. Several solutions are helping. Some hikers help to clean up after the 1000s that attempt the climb. Local villages are trying to make recycled art out of the trash. Some local organizations are also trying to make landfill out of human waste. Being so remote a region, none of this is easy but it needs attention.

This is a great current event story. There are many connections to the earth's sphere. Most of my students have heard of Everest. The height of Everest reaches the upper Troposphere with weather a concern for the climbers. For the Lithosphere connection, finding the mountain on Google Earth and learning how plate tectonics was involved in creating it. Students would also find it interesting to learn that seashell fossils have been found on Everest providing evidence that it was once under the sea. Another Atmosphere connection would be investigating the breathable air and that climbers have to use oxygen tanks. Biosphere connection would be both that humans are creating the trash and the trash is contaminating the biosphere of the land and local people. There could also be a connection to the Hydrosphere as the pollution is causing toxins in the water downstream affecting the biosphere at lower elevations.

This short article would be ideal as it could serve as a great example of how the spheres are connected and how easily humans can affect it. It would also serve as a piece for students to investigate solutions to the trash and human waste problems.

The next current event topic came from my NASA Goddard Feed. I would use this 4th grade and older students.

Title: NASA Surveys Hurricane Damage to Puerto Rico's Forests -NASA Goddard
<https://www.youtube.com/watch?v=HJAbGZsljJo>

This study is about the mission to research what happened, and the recovery of the trees during Hurricane Irma and Maria on Puerto Rico. Hurricane Maria created such devastation in Puerto Rico and the island is still dealing with damage. This would be a great current event as many students' remember when it happened and there are many sources of information that could be included in the research.

This particular story is a video about how NASA Goddard has instruments that are measuring the changes to forest that happened after the hurricane, and how the forest is again changing to its new environment. Data comes from big trees that have fallen and are creating a whole new area for sunlight to reach the former undergrowth. It can detect large trees that have just lost their leaves and how they are responding and regrowing after the storm. Studying this data will give scientists information about how a forest changes after a hurricane. Data comes from ground level, plane and satellite.

This video shows how scientists can learn and understand the nature of how change happens in a tropical forest. This perhaps will help predict damage and help with understanding devastating hurricanes in the future. They also mentioned that it helps to have information on the 'imprint' that Hurricane Maria has made in our atmosphere as it was a historically devastating storm.

This particular article is focusing on the biosphere. The reason that biosphere is damaged is its direct connection to the atmosphere and hydrosphere in the form of a hurricane.

My last current event is an article from Science Daily. I would use this article for 4th grades and older.

Titled: Billion-year-old lake deposit yields clues to Earth's ancient biosphere.
<https://www.sciencedaily.com/releases/2018/07/180718134813.htm>

The summary of this article is about an evaporated lake in Ontario is providing evidence of what life was like millions of years ago. Scientists working on this project found a sample ancient oxygen from 1.4 billion years ago. From this they can

understand the biosphere at that time was much smaller than today and only included life at the bottom of the food chain in microbes, cyanobacteria and algae.

With students, showing and discussing this article would illustrate the interconnectedness of the atmosphere and biosphere as a primary focus. As this study was found in an evaporated lake, lithosphere of the soil and the hydrosphere with the history of this lake could also be taken into account. Even though this article is focusing on the connection between atmosphere and biosphere, it is easy to take into account all the Earth's spheres as part of this exploration. It is also a great link to thinking about the history of the earth and how the spheres of the earth have changed and will keep changing.

While this discovery enlightens the Earth's past, it also helps gives us information regarding possible findings on other planets. Another announcement this week that I saw was that they have found a salt water lake on Mars.

<https://www.nationalgeographic.com/science/2018/07/news-lake-found-mars-water-polar-cap-life-space/> . Data gathered from this lake in Ontario can help scientists when we do uncover similar circumstances on other planets.

These current events from my news feeds are all tiny little stories that can have a big impact on our lives and our knowledge of the earth. Huge events like the volcano in Hawaii would also be a great event to research. I also find that these constant news feeds on the natural systems and discoveries give hope to our future. The more information we know, the better we can handle whatever crisis comes up next and a lot of that unknown is due to our changing climate. My intent is to show students that they are not powerless against the unknown. Science moves quickly. I used to think the science in a book was 'done'. But it is ever evolving and we learn more all the time.

Resources:

Hickok, K. (2018, July 15). How Much Trash Is on Mount Everest? Retrieved July 25, 2018, from <https://www.livescience.com/63061-how-much-trash-mount-everest.html>

Radcliffe, M (2018, July 11). NASA Surveys Hurricane Damage to Puerto Rico's Forests. Retrieved from <https://www.youtube.com/watch?v=HJAbGZsljJo>

McGill University. (2018, July 18). Billion-year-old lake deposit yields clues to Earth's ancient biosphere: Finding could help inform astronomers' search for life outside our solar system. *ScienceDaily*. Retrieved July 29, 2018 from www.sciencedaily.com/releases/2018/07/180718134813.htm

