



**JUNE 24-28, 2019 UNIVERSITY OF FLORIDA**

**“TAKING IT BACK TO THE CLASSROOM” ACTION PLANS**

**Teacher(s): Gary Carlson**

**Grade(s): 9<sup>th</sup>**

**Subject(s): Science**

**Idea 1**

I plan on using the models idea to talk about the scientific method. Many students have big ideas when thinking about science fair project. I want to show the small changes in a system can have a big effect in the system.

Learning Goals/Standards

**SC.912.N.1.2 Describe and explain what characterizes science and its methods.**

**SC.912.N.1.6 Describe how scientific inferences are drawn from scientific observations and provide examples from the content being studied.**

**Idea 2**

I want to integrate the research that was presented this week into my current lessons. This will show that current research being complete. This should show more relevance in the topics I currently cover.

For example, I will use the data from Dr. Skrivanek and the spring water flow information from Dr. Nathan.

Learning Goals/Standards

**SC.912.N.3.1 Explain that a scientific theory is the culmination of many scientific investigations drawing together all the current evidence concerning a substantial range of phenomena; thus, a scientific theory represents the most powerful explanation scientists have to offer.**

**Idea 3**

Use the newspaper website to have student see what was going on where they live during important times in science. Charles Darwin (1859), Watson & Crick (1953), Spontaneous generation.

- <https://chroniclingamerica.loc.gov/>

Learning Goals/Standards

**LAFS.1112.RST.3.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon,**

#### **Idea 4**

When talking about the carbon cycle, take some time to talk about carbon sequestration. I also currently use an activity for project learning tree southeastern forests and climate change (Activity 8 – Counting Carbon)

Learning Goals/Standards

**SC.912.L.17.10** Diagram and explain the biogeochemical cycles of an ecosystem, including water, carbon, and nitrogen cycle.

#### **Idea 5**

When talking about data and graphs, use some of the data from Dr. Skrivanek talk and spend some time talking about climate change and have the students look at how that information is presented.

Learning Goals/Standards

**SC.912.L.17.15** Discuss the effects of technology on environmental quality.

**What additional resources do you need in order to act on these ideas?**

- PowerPoints from the week located on the Teaching Florida's Climates Google drive
- Chronicling America: <https://chroniclingamerica.loc.gov/>
- Project Learning Tree: <https://www.plt.org/>
- Project Learning Tree Southeastern Forests and Climate Change curricula
  - <https://www.plt.org/curriculum/southeastern-forests-climate-change/>
- Project Wet: <https://www.projectwet.org/>
- Florida Memory: <https://www.floridamemory.com/>
- UF CPET Science Information for Teachers (SIFT) guide: <http://history.cpet.ufl.edu/siftguide/default.html>
- Science Teacher Resources: [www.nclark.net](http://www.nclark.net)