



Humanities and the Sunshine State
What Sustains Us?
Florida Ecosystems in an Era of Rapid Change
University of Florida 20-24 June, 2016

ACTION PLAN

(ONLY PARTIALLY DEVELOPED)

Teacher(s): Brenda Breil

Grade(s): 7

Subject(s): Science

Title of Lesson (4 periods): Topics in Climate Change

Learning Objectives:

1. Select and research something that has been affected by climate change.
2. Prepare and present the information as described below.

Standards Addressed:

- Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water. (SC.7.E.6.6)
- Others will be identified for each student based on their topic.

Context:

Students will already have

- learned about climate change
- learned about and practiced systems thinking

Lesson Outline:

Students will

- Select a subject affected by climate change (see the “Topics Table”).
- Complete research the topic in a Google Doc.
- Select from one of the following for their presentation.
 - Create a systems map showing the relationships between the conditions brought about by climate change and their impact.
 - it can be projected and explained
 - or you can reproduce it as a ShowMe that can be played.
 - Write, conduct, and videotape an interview (oral history) with a person that has personally experienced the effect of climate change you have researched.

- Write a story that takes place in the future related to the topic. You may take the perspective of an organism experiencing the results of the change. For the presentation, give a brief description of your topic so your audience has some background on the topic. Then read your story.
- Create a slide show on the topic. (This might be available for a lower grade)

Topics Table (These are just ideas. Clear other ideas through me.):

- Places/cultures:
 - Islands/Island nations: Tuvalu, Kivalina, Kiribati, Hawaii'
 - Coastal Cities: Miami, New York,
 - Biomes: Everglades, rainforest, arctic, alpine exosystems
 - Countries: Nigeria,
- Animals:
 - Land Mammals: pica, wolverine, caribou/reindeer, panda, tiger
 - Ocean animals: polar bears, seals, penguins, walrus, turtles, coral
 - Migrating birds and fish
- Plants
 - Agriculture (maple syrup, cocoa)
 - Boreal forest
- Health
 - Infectious diseases
 - Heat strokes
 - Human/animal conflict
 - Natural events
- Events
 - Hurricanes, storms, forest fires, droughts
- Ecology
 - Shifting ecosystems and parts of ecosystems and those consequences
 - Invasive species
- Physical World
 - Ice melting
 - Sea level rising
 - Ocean acidification

Systems thinking connection (learning habits and/or tools used): One of the options for the project.

Learning Strategies:

Science Concept(s):

- Cause and effect
- Topic dependent

Humanities Concept(s):

- Cultural effects of climate change

Student Assessment Strategies:

- Both the research and presentation are summative assessments.

Benefit to my students:

- More deeply understand the effects of climate change.
- Develop a global view.

Resources and Materials (supplies needed for activities):

- Chromebooks for research and work
 - Google Docs for research (interactive with teacher)
 - Google Slides
- Flip Cameras for filming interviews (oral history)
- iPads for recording ShowMes
- Projector, computer, and doc cam for presentations