JUNE 24-28, 2019 UNIVERSITY OF FLORIDA

ACTION PLAN TEMPLATE

Teacher(s): Marilynn Pedek Howard

Grade(s): 11-12

Subject(s): AP Environmental

Title of Lesson: Exploring the Effects of Climate Change in West Palm Beach Through

the Use of Photographs

Learning Objectives:

Students will explore the local effects of climate change through the use of photographs.

Standards Addressed (if applicable):

Topic 9.4 Increases in the Greenhouse Gases

Learning Objective: Identify the threats to human health and the environment posed by an increase in greenhouse gases.

Topic 9.5 Global Climate Change

Learning Objective: Explain how changes in climate, both short- and longterm, impact ecosystems.

Lesson Outline:

Part 1 - Selecting a historical photo from the West Palm Beach Area

- 1. Model accessing appropriate sources.
 - a. floridamemory.com
 - b. family/friends photos (at least 25 years old)
 - c. https://www.palmbeachpost.com/photos
 - i. Guest speaker from Palm Beach Post Jennifer Podis
- 2. Students submit 3 photos they would like to use in this activity. Student must explain why each photo was selected. Teacher will then approve one photo for each student (this is to ensure a wide range of environements).

Part II - Comparing historical with current photo

- 3. Students will take a current photo of the same spot illustrated in the historical photo.
- 4. Using a speed dating process students will share observational differences they see related to the environmental issues studied during the climate change unit.

5. Individual students will create a list of differences seen between the photos using the input they received during the speed dating activity.

Part III - Analysis

6. Each student will analyze five of the differences cited in part II. The analysis must be at least one paragraph in length and must detail a specific climate change element related to the difference cited.

Learning Strategies:

speed dating

http://www.classtools.net/blog/using-speed-dating/

https://youtu.be/ew28a3OKttk

• compare and contrast

Science Concept(s):

- Greenhouse effect
- Climate Change

Humanities Concept(s):

- writing
- analyzing history
- photography

Technique(s)/Resource(s) Incorporated from Teaching Florida's Climates Workshop:

- speed dating
- accessing archived information

Student Assessment Strategies:

- assessment rubric
 - https://docs.google.com/document/d/18c6EFN7njyQ_TJpZzicklkD3KcFBxSXDIF WHdjxwzLQ/edit?usp=sharing

Benefit to my students:

making a global issue local

Resources and Materials (supplies needed for activities):

• Historical photos - see sources listed above

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Exploring the Effects of Climate Change in West Palm Beach Through the Use of Photographs

Assessment Rubric

Criteria	Points Assigned	Points Earned	Teacher Comments
Part 1	20		
3 photos submitted	5		
Photos submitted on time	3		
Each photo's source is cited	3		
Each photo location is recorded	3		
Explain why each photo was selected	6		
Part 2	30		
Student takes current photo by due date	5		
Current photo represents historical location of original photo	5		
Student actively participates in speed dating activity	10		
Student creates list of significant differences between photos	5		
The differences cited can be explained through changes in climate	5		
Part 3	50		
Student submits analysis on time	5		

Five differences are analyzed	5	
Analysis is at least five paragraphs long (one paragraph for each difference)	5	
Analysis is grammatically correct. Full sentences are used.	5	
Analysis is scientifically accurate.	15	
Analysis includes content mastered during the unit.	15	