

Yale 2012 PIER Summer Institute Global Movement
Sponsored by the Yale Programs in International Educational Resources (PIER)

TITLE OF UNIT: Mother Nature's Fury Respects No Boundaries

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Subject Area: The Causal Link of the Weather and Environment on Human Migration Patterns

Grade Level(s): Adult Education Learners – ESOL Intermediate to High Intermediate Level Students

Time Frame to Allow for Unit: Three to four lessons (four days)

Introduction:

This unit explores the causal link of the weather and environment on human migration patterns. We will examine weather-related causes of migration based on actual examples, with a particular focus on the 2011 drought in Somalia, the 2010 hurricane in Haiti, and the 2005 tsunami in Indonesia. The reason for this focus is that there are a significant number of students in our program who became refugees as a result of these events. This lesson plan also considers the role of these events on the availability of potable water, and the ongoing efforts to address those challenges. As a prerequisite to exploring this topic, the students will learn the basic vocabulary for various weather conditions/patterns around the world since they are second-language learners.

Geographic Connections:

With the assistance of maps and an interactive atlas, students will be able to identify weather conditions in the United States and the rest of the world. The interactive atlas will also allow students to pinpoint various geographic locations in the macro world and trace their own journeys from their countries of origin to the United States. Furthermore, the interactive atlas will allow students to view the geography of the continents affected by the drought, hurricane and tsunami which resulted in mass migration. On the Guardian website, the students will be able to identify the geography (highlighted in yellow) where the drought occurred in Somalia and the conditions within the refugee camps.

Vocabulary:

Vocabulary 1 (Preliminary Lesson)

Scattered showers – on and off rain at different times

Fair – no precipitation (not stormy)

Clear –no clouds or fog

Cold front – mass of moving cold air

Warm front – mass of moving warm air

Fahrenheit – temperature measurement used in US

Celsius – temperature measurement used in rest of world
 Unseasonably – significantly different from normal for that time of year
 Outlook – expected conditions
 Predicted – tell something before it occurs
 Currently – now or at this time
 To dip – drop
 To reach – go up

Structures:

It’s still raining.
 It looks like . . .
 . . . is going to continue through . . .
 down the West Coast
 as far south as
 . . . may turn to . . .
 across the South

Vocabulary 2 (Weather-Related Causes of Migration)

Drought – period of prolonged dryness due to lack of rain
 Famine – an extreme scarcity of food
 Hurricane – large circular storm
 Tsunami – massive and killer sea waves caused by underwater earthquake
 Devastation – damage or destruction caused by war or natural disaster
 Migration – to move from one country or location to another
 Migratory Routes – means of access used to move from one country or location to another
 Push-Pull Factors – various opposing forces working at the same time against one another
 Relief – assistance, such as shelter or food
 Refugee – person who flees his/her country and is unwilling to return due to fear or threat of a natural disaster, persecution, torture, or death
 Purification – the process of making water safe to drink

Stage 1 – Desired Results
<p>Content Standard(s):</p> <p>Cases Content Standards: Specific to ESOL Intermediate 2 (or Advanced Level students)</p> <ul style="list-style-type: none"> • 2.3.3 Interpret information about weather conditions. • 5.2.4 Interpret information about U.S. states, cities, geographic features, and points of interest. • 5.2.5 Interpret information about world geography. • 7.2.2 Analyze a situation, statement, or process, identifying component elements and causal and part/whole relationships

- 7.2.3 Make comparisons, differentiating among, sorting, and classifying items, information, or ideas.
- 7.3.1 Identify a problem and its possible causes.
- 7.3.2 Devise and implement a solution to an identified problem.
- 7.3.4 Use problem-solving strategies, such as breaking down the problem into component parts and generating alternative or creative solutions.
- 7.7.1 – 7.7.5 Demonstrate the ability to use information and communication technology in a safe and responsible manner.

Understanding (s)/Goals:

Students will understand that:

- Various weather conditions/patterns affect different geographic locations around the world.
- How weather and particular environmental factors affect human migration patterns around the world.
- Weather also impacts human living conditions as relates to the availability of potable water.
- They are global citizens (as they are part of a larger world) because empathy, compassion and understanding are needed for those who are affected by natural disasters around the world.
- How to use comparatives and superlatives (in their writing) to describe weather conditions in their countries as compared to those in others.

Essential Question(s) Related to Theme(s):

- How does the weather and environmental factors affect human migration patterns?
- What is the relationship between the availability of potable water and decisions to migrate?
- What are the obstacles people face when they migrate as the result of natural disasters?

Student Objectives (Outcomes):

Students will be able to:

- Write a short paragraph about their native country and the weather conditions associated with that country.
- Alternatively, pair off and interview each other (ask each other questions orally) about the weather in their respective countries or regions.
- Label a map depicting their countries of origin and tracing their journeys from those countries to the United States.

- On the map, they will be able to designate any type of impact that the weather may have had on their journey to the United States.
- Utilize critical thinking skills by comparing and contrasting their past lives either as immigrants or refugees to their current lives in the United States. This can be accomplished through the demonstration of a Venn diagram.
- See themselves as global citizens by role playing and developing empathy for victims of natural disasters around the world. This can be accomplished through a collaborative problem-solving activity.
- Identify the impact that weather has on human living conditions as they relate to the availability of potable water. This can be accomplished through the experiment demonstrated in the PUR packet videos.
- Distinguish the means through which water becomes contaminated by a natural disaster and the subsequent purification of it. Note – Students should be able to observe in the video that the dispersion of sediment and elements in the first water container causes the water to be dirty, whereas the clean water in the second container shows an aggregation of the sediments and elements in the bottom of the container.

Stage 2 – Assessment Evidence

Performance Task(s):

- Students write a short weather report about the weather conditions in their native countries.
- Students interview each other (with a pen and notebook) and ask each other questions about their personal journeys to the United States, such as:
 “When did you arrive?”
 “How long did it take?”
 “What obstacles did you face on your journey?” (i.e., weather, transportation, economic factors)
- Students label a map tracing their routes from their countries to the United States.
- Students compare and contrast their past and present lives using a Venn diagram.
- Students put themselves in the shoes of the victims of natural disasters by role playing.
- Students perform the experiment with the PUR water packet to understand the impact that contaminated water has on human living conditions.

Other Evidence:

- Students demonstrate ability to use interactive technology by using the Atlas of Human History on the National Geographic website.
- Students in a collaborative effort share their maps with each other discussing their journeys to the United States. This can be done in small groups by hanging the maps on the walls or spreading them out on tables.
- Students practice comparatives and superlatives by describing the weather conditions in their countries compared to those conditions in other countries.
 i.e. The weather in Somalia is hotter than Connecticut.
 Medellin, Columbia has the most pleasant weather in the world.

Stage 3 – Learning Plan

Learning Activities:

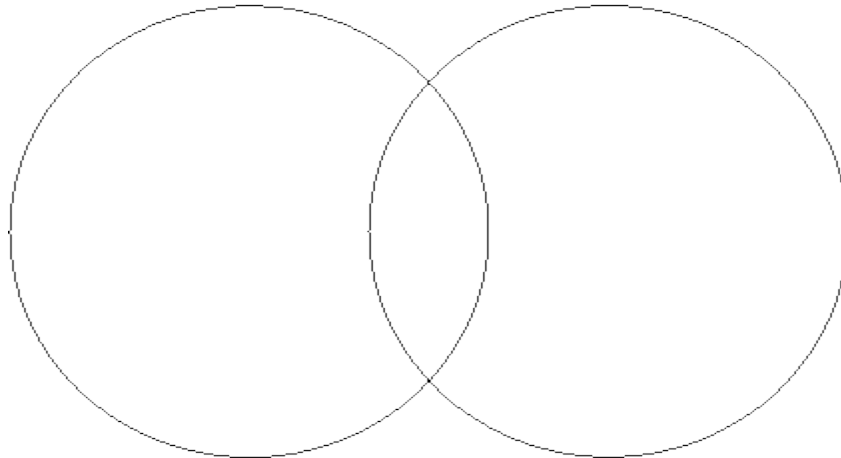
1. As a preliminary lesson, first introduce students to the key vocabulary for the different weather conditions in various regions of the United States. Refer to Vocabulary List No. 1.
2. After the vocabulary list is thoroughly reviewed with the students, in order to check for listening comprehension, have students listen to an audio weather forecast (around the country) by a meteorologist several times. Refer to the transcript of the forecast in the document attachment.
3. Play the audio cassette again and have the students write the weather conditions (described in the forecast) for a particular city on the map handout provided to them. Refer to the map in the document attachment.
4. In conjunction with the preliminary lesson, incorporate a basic grammar lesson on comparatives and superlatives so students can use them when describing weather conditions in their native countries as compared with weather in the rest of the world. Please refer to the ESOL websites in the bibliography for instructional activities on comparatives and superlatives. As part of this section, have the students practice this language skill by writing a short report about the weather conditions in their own countries. Then they can pair up and interview each other about the weather in their respective countries.
5. Next, discuss the connection between weather and migration based on actual weather-related causes of migration.
 - a. Provide a brief overview/background information of these causes using the following examples:
 - i. Drought in Somalia in 2011
 - ii. Hurricane in Haiti in 2010
 - iii. Tsunami in Southeast Asia in 2005
 - b. Drawing on resources from National Geographic, BBC, and New York Times websites, show selection of videos of Somalia drought, Haiti hurricane, and Southeast Asia tsunami, demonstrating the magnitude of devastation, resulting in massive migration. Videos related to the Somalia drought and Haiti hurricane are particularly relevant because a significant number of students in the ESL program are refugees from Somalia. Additionally, chains of families migrated from Haiti to the New Haven area in the aftermath of the Haiti hurricane
6. After these cases are thoroughly examined and explored with the students (augmented by the videos), have the students role-play in a collaborative problem-solving activity based on the following steps:
 - a. Students work in groups of two with a specific case assigned to each group.
 - b. One student assumes the role of a victim of a natural disaster, while the other student assumes the role of a United Nations relief worker.
 - c. The student (assuming the role of the victim) writes a short request to the United

Nations asking for relief. In the request, the student identifies the problem(s) requiring the relief, and explains the emotional and physical toll which has been inflicted by the devastation.

- d. The other student (assuming the role of the UN relief worker) provides the victim with a short written response that identifies three solutions to the problem.
 - e. The students will then role play with one another, each in their respective role of “victim” and “UN relief worker.” The students will then reverse roles, with the “victim” taking on the role of “UN relief worker,” and the “UN relief worker” taking on the role of “victim.”
7. After they have completed this activity, the students can share their experiences with their other classmates. In conclusion, by putting themselves in the shoes of victims of natural disasters or other conflicts around the world, and seeing the problem(s) through the perspective and eyes of these victims, they will be able to develop empathy, compassion, and understanding of other cultures/peoples and see themselves as responsible citizens in a larger global community.
 8. Next, show students the documentary film God Grew Tired of Us, based on the story of four Sudanese men which chronicles their lives from their time in a refugee camp in Kenya to their ultimate journey and resettlement in the United States.. This is important because it shows the students a real-life migration story based on the hardships and adversities faced by four people.
 9. After the students watch the film, have them share any thoughts and comments that they may have about the documentary. To elicit discussion, ask the students leading questions based on the following:
 - a. Have you ever experienced an unfortunate situation in your life?
 - b. What was your reaction?
 - c. What did you do to adapt to your new situation?
 10. As a follow-up activity to the film, have students label a map tracing their own migration/journeys from their native countries to the United States, and designate any impact that the weather or other conflicts may have had on their journeys. Also, the students can trace and navigate their journeys on the interactive maps listed in the bibliography websites. Lastly, the students can share their maps with one another by hanging them on the walls or spreading them out on tables.
 11. Finally, have students compare and contrast their lives in their countries to what life is like for them now in the United States by completing a Venn diagram. Before they complete this activity, demonstrate to them an example of a Venn diagram based on the documentary God Grew Tired of Us.

Differences – Life in the United States

Differences – Life in Refugee Camp



- 1- Apartments
- 2 – Electricity
- 3 – Water & Sewerage Systems
- 4 – Job Opportunities
- 5 – Goods (food & clothes)
- 6 – Services (bus & medical)
- 7 – Security
- 8 – Freedom
- 9 – New Friends/Bonds

- 1 – Tents
- 2 – No electricity
- 3 – No Sewerage
- 4 – No Jobs
- 5 – Food Rations
- 6 – Medical Shortages
- 7 - Fear
- 8 - Restricted Mobility
- 9 - Strangers

Similarities

- 1 – Shared Space
- 2 – Aspirations
- 3 – Anxiety/Uncertainty as to Future

12. After the students complete their Venn diagrams, divide the class by groups of three. Students can share their ideas in their Venn diagrams based on their real-life experiences in their native countries as compared to their lives in the United States, showing the differences and similarities between both.
13. Since the weather also has an impact on living conditions in the world, have students watch the PUR videos on the PIER website showing the vital importance of purified and drinkable water. While the students watch the videos, they should notice the desperation of the people in the camps because of the absence of drinkable water in their area, as evidenced by the brown images of the rivers and wells from which they are drawing contaminated water. As a follow-up activity, ask students orally if they can distinguish the means by which water becomes contaminated and subsequently purified. To accomplish this goal, divide the class into groups of three and have students perform the PUR experiment showing the dispersion of sediment and other elements in the untreated/dirty water container and the aggregation of the sediment and other elements on the bottom of the purified water container. Then have the students describe the

results of their experiments.

14. To wrap up this lesson unit, bring the entire class together and have several students share their overall observations based on what they have learned in this process, making the connection between the weather and human migration patterns.

In conclusion, based on the combination of performance task and lesson activities, the ultimate goal of this lesson unit is to equip the students with the necessary vocabulary, language, mapping, critical thinking, and interactive technology skills so that they are eventually prepared to participate in the global economy and thus become productive and responsible global citizens.

Resource List/Bibliography:

1. ESOL Resources:

Listening Tasks For Intermediate Students of American English (Schechter - Cambridge Press, 1988)

2. Favorite ESOL Websites:

Adele's Corner

<http://www.members.iinet.net.au/~adelegc/index.html>

ELC Study Zone

<http://web2.uvcs.uvic.ca/elc/studyzone/>

ESL Blues

<http://ww2.collegeem.qc.ca/prof/epritchard/>

3. Web Resources:

<https://genographic.nationalgeographic.com/genographic/globe.html> (accessed July 29, 2012).

Interactive map of world that students can use to trace their own journeys to the United States.

<http://video.nationalgeographic.com/video/news/culture-places-news/mongolia-nomad-vin/> (accessed July 29, 2012). Video illustrates how drought conditions in Mongolia have forced many once-nomadic dwellers to move into the cities.

<http://www.bbc.co.uk/news/world-latin-america-11700977> (accessed July 29, 2012). Article about the effects of Hurricane Tomas in November of 2011 on earthquake-ravaged Haiti.

<http://www.nytimes.com/slideshow/2011/07/16/world/africa/16somalia.html> (accessed July 29, 2012). Slideshow depicting the effects of the drought in Somalia.

<http://www.guardian.co.uk/global-development/interactive/2011/nov/01/somalia-drought-camps-map-interactive> (accessed July 29, 2012). Interactive map describes extent of drought in Somalia, and provides links to pictures depicting conditions in various refugee camps.

<http://www.godgrewtiredofus.com/> (accessed July 29, 2012). Website for 2006 documentary, God Grew Tired of Us, depicting the experiences of three young South Sudanese men journeying from their war-ravaged home to the United States.

www.venndiagram.net/a-blank-venn-diagram-can-help-teachers.html (accessed July 20, 2012). Website explains the purpose and use of Venn diagrams.

4. PIER Resources:

www.csdw.org/csdw/gallery.shtml (accessed August 2, 2012) Six flash videos demonstrating the use and benefits of PUR water treatment technology; drought and other natural disasters may affect the availability of potable drinking water, thus resulting in migration.

Exceptional People: How Migration Shaped Our World and Will Define our Future (Golding, Cameron, and Belarajan - Princeton University Press, 2011),

How Are You Going to Use This Unit?

This unit will be used either in an ESOL Intermediate 1 or Intermediate 2 class, or possibly an ESOL Advanced 1 class at the New Haven Adult Education Center sometime early in the fall semester, approximately in September or October.