Rising from the Dust: Learning about Natural Disasters Using the Novel, *Esperanza Rising*

**Author**
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**Grade Level**
5

**Duration**
4 class periods

### National Standards

<table>
<thead>
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<th>GEOGRAPHY</th>
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<tr>
<td><strong>Element 5:</strong> Environment and Society</td>
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<tr>
<td>14: How human actions modify the physical environment</td>
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<td>15: How physical systems affect human systems</td>
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### NEXT GENERATION OF SCIENCE STANDARDS

| MS-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment. |

### ELA

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<tr>
<td><strong>Key Ideas and Details</strong></td>
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<tr>
<td>5.RI.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.</td>
</tr>
<tr>
<td>5.RI.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text, based on specific information in the text.</td>
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<table>
<thead>
<tr>
<th>Craft and Structure</th>
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<tr>
<td>5.RI.5 Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, and problem/solution) of events, ideas, concepts, or information in two or more texts.</td>
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### Writing

| 5.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |

### MATHEMATICS

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<th>Measurement and Data</th>
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<td>5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step, real-world problems.</td>
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### SCIENCE

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<tr>
<td>5.L4U3.11 Obtain, evaluate, and communicate evidence about how natural and human-caused changes to habitats or climate can impact populations.</td>
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### Arizona Social Science Standards

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<tr>
<td>Human-environment interactions are essential aspects of human life in all societies.</td>
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<tr>
<td>5.G2.1 Describe how natural and human-caused changes to habitats or climate can impact our world.</td>
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| Examining human population and movement helps individuals understand past, present, and future conditions on Earth’s surface. |
| 5.G3.1 Use key historical events with geographic tools to analyze the causes and effects of environmental and technological events on human settlements and migration. |

| Key concepts include but are not limited to consequences of territorial expansion on American Indians, the institution of slavery, the positive and negative impact of new technologies on the environment and the growth of cities, and the impact of transportation and infrastructure on settlement and migration. |

| Global interconnections and spatial patterns are a necessary part of geographic reasoning. |
| 5G4.1 Describe how economic activities, natural phenomena, and human-made events in one place or region are impacted by interactions with nearby and distant places or regions. |
Rising from the Dust:

### SIOP Elements

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<td>Guided practice</td>
<td>Small groups</td>
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<tr>
<td>Linking to past learning</td>
<td>Independent practice</td>
<td>Partners</td>
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<td>Strategies used</td>
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<td>Speaking</td>
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<td>Listening</td>
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<td>Oral</td>
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### Arizona English Language Proficiency Standards

#### Grade 5

**Basic**

**Listening and Reading**

Standard 1 By the end of each language proficiency level, an English learner can construct meaning from oral presentations and literary and informational text through grade appropriate listening, reading, and viewing.

B-2: recount a text including specific details and information.

**Speaking and Writing**

Standard 3 By the end of each language proficiency level, an English learner can speak and write about grade appropriate complex literary and informational texts and topics.

B-3 compose informational text that includes details to develop a topic while using appropriate conventions.

B-5: use examples of precise language and domain-specific vocabulary within informative texts.

**Listening, Speaking, Reading, and Writing**

Standard 6 By the end of each language proficiency level, an English learner can participate in grade-appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.

B-5: contribute information and evidence to collaborative oral and written discussions.

Standard 7 By the end of each language proficiency level, an English learner can conduct research and evaluate and communicate findings to answer questions or solve problems.

B-1: gather information from multiple provided resources to answer questions.

B-2: sort evidence into categories.

Standard 9 By the end of each language proficiency level, an English learner can create clear and coherent grade-appropriate speech and text.

B-2: apply understanding of how ideas, events, or reasons are linked throughout a text by using frequently occurring linking words and temporal words when writing and speaking.

### Overview

Extreme drought conditions occurred during 1930 and 1936 across the Great Plains. The crops died due to the lack of rain and the loose topsoil blew away during dust storms. More than a million acres of farmland was affected, and thousands of farmers lost their farms during the Dust Bowl. Migrant farmers moved west in search of farming jobs. They encountered many immigrant farmers in search of farming jobs as well.

### Purpose

In this lesson, students will explore the causes and effects of a natural disaster. Students will record on a graphic organizer the causes and effects of a dust storm. Students then will work in small groups to apply what they learned using the novel, *Esperanza Rising*. The end product will be a cause-and-effect brochure explaining an arid zone, a drought, and the Dust Bowl. This lesson includes strategies for diverse learners (ELLs).
Rising from the Dust

Key Vocabulary

drought: a long period of time when there is very little rain or snow
erosion: wearing away of the earth by wind, water, waves, or glaciers
grasslands: land with grass growing on it
plains: large areas of flat or mostly flat land
agriculture: growing food or needed materials
topsoil: the upper part of the soil that is very good for growing food
arid: a place without much rain

Materials

• Class set of Esperanza Rising by Pam Muñoz Ryan
• What was the Worst Environmental Disaster in the United States?
• Dryland Climates of North America map
• Setting the Scene PowerPoint
• Looking at the Dust Bowl as Social Scientist PowerPoint
• Vocabulary Cards
• Construction paper
• Scissors/Glue/Colored pencils
• Cause & Effect Graphic Organizer and Answer Key
• Physical Regions of the US map
• Living with Natural Disasters Worksheet
• Student Example of Brochure (if possible)
• Vocabulary Test and Answer Key

Objectives

The student will be able to:

1. identify and explain the causes and effects of an arid zone, a drought, and the Dust Bowl.
2. use math skills to calculate square miles on a map.

Procedures

Notes to Teacher:

1. SESSION ONE activities could begin prior to reading Chapters 1-9 of Esperanza Rising.
2. Background Information on the Great Depression and the Dust Bowl can be found at PBS: “Surviving the Dust Bowl” (52 min. video) http://www.pbs.org/wgbh/amex/dustbowl/
3. Prerequisite Skills: Students can use map scale and determine square miles of area by using shapes such as rectangles and triangles.

SESSION ONE

Engage:

1. Write the vocabulary words listed in Key Vocabulary on the board. Have students give definitions to the words. Then share the vocabulary cards with students. (Preparation: Linking to past learning)
2. Ask students, “Who has been in a dust storm?” (Preparation: Linking to background)

Explore:

1. Write the following questions on the board:
   • Is a dust storm a natural disaster?
   • What are the causes of a dust storm?
   • What are the effects of a dust storm?
2. As a whole group, discuss the answers to these questions. (Grouping Option: Whole class)
3. If students have read Chapters 1-9, then proceed with this part: Ask students to identify what sentences and/or paragraphs the author used in Chapter 9 of Esperanza Rising to describe the effects of the Dust Storm on the farm and the people (pages 147-153). (Integrating Processes: Reading, Listening)

SESSION TWO

Explain:

1. Print off the article, “What was the Worst Environmental Disaster in the United States?” from About.com Environmental Issues http://environment.about.com/od/environmentalevents/f/dustbowl.htm
3. With partners, have students record their findings on the Cause & Effect Graphic Organizer. (Encourage students to explain the concepts of a drought and define vocabulary in their own words.) (Integrating Processes: Writing) (Grouping Option: Partners)
4. Model one or two of the answers on the graphic organizers, so students understand how to complete the assignment. (Scaffolding: Modeling)

SESSION THREE

Elaborate:
Rising from the Dust

1. Show one or both of the PowerPoints (Setting the Scene and/or Looking at The Dust Bowl as a Social Scientist). (Application: Promotes engagement)
2. Have students color and label (with their state names) the region affected by the Dust Bowl on their Physical Regions of the US map. (Application: Hands-on)
3. Review how to use the map scale, how to convert inches to miles and how to determine area. Assign the math problem: Determine approximately how many square miles of the United States were affected by the Dust Bowl. Model part of the math problem for them to get them started by showing how dividing the area into rectangles and triangles, they can calculate the square miles. (Scaffolding: Modeling)

SESSION FOUR

Evaluate:
1. Distribute the Living with Natural Disasters Worksheet. Ask students, “What could people living in drought prone areas do to prepare for dust storms? What could people do to prevent dust storms from occurring or being so damaging?” Emphasize previous session’s information to propose solutions to people who live in environments that are susceptible to droughts. (Grouping Option: Whole class)
2. Place students into groups of three or more. Explain that each group will decide who in the group will do which of the three parts (Drought, Arid Zones, and Dust Bowl). They will be making a brochure that has 3 sections. The sections will be: Drought, Arid Zones, and Dust Bowl. With each section, there will also be cause and effect information and an image illustrating important information about that topic.
3. Model how to fold a piece of paper in 3 sections. Model how to make a title page with their names as authors. Model what they will be doing with the 3 inside sections. The final page (folded inside) can be of their choice to point out something that they found interesting, like a map or a fun fact. (Grouping Option: Small group, Scaffolding: Modeling)
4. If possible, show students a student sample so they can visualize the finished product. (Scaffolding: Modeling)

Assessment

ELA, Science and Geography
The Cause and Effect Graphic Organizer can be graded. Mastery will be considered a score of 80% or higher.

The Vocabulary Quiz can be graded. Mastery will be considered a score of 80% or higher.

The brochure can be graded using the 6 Traits Writing Rubric. A score of 4 or higher in the area of Ideas and Content will be considered mastery.

Geography and Mathematics
The map assignment can be graded. Mastery will be considered a score of 100%. (Assessment: Written)

Extensions

- Students can research drought tolerant vegetation or options for bringing more water to drought areas.
- Students can go on a field trip to the Pueblo Grande Museum to learn about ancient cultures and how they survived in the rough Arizona climate.
- Play “I Have, Who Has?” Vocabulary Game for the novel, Esperanza Rising by Pam Muñoz Ryan. These vocabulary words can be used for a quiz for your English proficient students.

Sources

Dryland Climates of North America map from Meig’s Maps of Arid and Semi-arid Regions

Physical Regions of the United States map from Arizona Geographic Alliance
http://geoalliance.asu.edu/azga/


Setting the Scene PowerPoint from Arizona Geographic Alliance lesson called “From the Dust Bowl to Sunny California” found at http://geoalliance.asu.edu/azga/dustbowl

Vocabulary Game, “I Have, Who Has?”
http://buildingamerica.pbworks.com/w/page/36541233/Esperanza%20Rising%20Vocabulary%20Activities

6 Traits Writing Rubric used by Mesa Public Schools
http://www.mpsaz.org/bskills/secondary/write_sec/rubrics/mps-6-traits/files/3-6_rubric.pdf
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What was the Worst Environmental Disaster in the United States?" from About.com

http://environment.about.com/od/environmentalevent/s/dustbowl.htm