



Oklahoma Alliance for Geographic Education

Teacher Training | Curriculum Development | Outreach Programs | and More!

TERRACED FARMING IN EAST ASIA

Susan Smith

OKAGE Teacher Consultant, Norman, Oklahoma

World Geography Academy – Session I

Wednesday, November 6, 2013

University of Oklahoma, Norman

Materials may only be reproduced for the classroom and presentations
when proper acknowledgement is given to the author and
the Oklahoma Alliance for Geographic Education.

TERRACED FARMING IN EAST ASIA

Susan A. Smith, NBCT & OKAGE TC
Eisenhower Middle School
Lawton Public Schools
Lawton, OK
sasmith@lawtonps.org

Grade Level: 7th

Purpose/Overview:

The purpose of this activity is to provide students information on how terraced farming in East Asia provides solutions to their food needs.

Essential Question:

Why is terrace farming necessary for providing food needs in many East Asian countries?

National Geography Standards from *Geography for Life*

Geographic Elements and Standards:

Places and Regions --

4. The physical and human characteristics of places

Environment and Society --

14. How human actions modify the physical environment

Oklahoma Academic Standards:

Grade 7 World Geography: Eastern Hemisphere

Literacy Skills Standard 1: The student will develop and demonstrate Common Core Social Studies reading literacy skills.

B.4. Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.

C.7. Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

Literacy Skills Standard 2: The student will develop and demonstrate Common Core Social Studies writing literacy skills.

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

Content Standard Content Standard 5: The student will analyze the interactions of humans and their environment in the Eastern Hemisphere.

2. Evaluate the effects of human modification of and adaptation to the natural environment including the

A. Deforestation of Indonesia's rainforests,

B. Creation of living space through the drainage of seawater and the system of dikes in the Netherlands,

C. Transformation of arid lands of the Arabian Peninsula through introduction of western irrigation methods,

D. Use of terrace farming and double-cropping as solutions to food needs of East Asia, and

E. Benefits and dangers of nuclear power generation as exemplified by the environmental disaster at Chernobyl.

Materials:

World atlases, desktop world maps, pencils, colored pencils, copy paper, Internet connection, LCD projector, computer, a copy of Terrace Farming Chart (included with lesson) for each student

Time Period: One to two 45-minute class periods

Procedures:

Ask students what they think terrace farming is. If no one knows the correct answer have students locate the definition. Ask someone to define this type of farming. (Note to teacher: Terrace or terraced farming is a unique solution for farming hillsides. Farmers build terraces to shore up a hillside and provide multiple levels of farming.) Ask where they believe this method of farming is practiced and why it is practiced. Have students list places the class mentions in their notes. This list will be utilized when a slideshow of photos (see **Resources**) is shown.

Give each student or small group of students a world map. Have them locate and list countries of East Asia. Discuss and take notes on the water regions in those areas capable of supplying water for agricultural needs. Ask how terrace farming can be used in the areas without large plots of land for agriculture. Students should write in their notes the reasonable answers discussed. Hand out copies of the Terrace Farming Chart included in this lesson; it may be the best way for students to record this information.

Have slideshow of photos ready to show students. Instruct them to list on their Terrace Farming Charts the location of the place, describe what they see in detail, and illustrate the slide. Once you have shown this slideshow once, ask students to describe aloud the same photos as you show them again. Students are able to add more to their notes and illustrations as necessary. From one photograph to the next, discuss how they are similar and different.

Closure: Instruct students to select three different countries where terraced farming is utilized. On copy paper, using the notes in their Terrace Farming Charts, they are to illustrate and label these locations, describe each location, and write a short paragraph comparing and contrasting the locations.

Assessment:

1. Teacher observes students and checks for accuracy on their charts.
2. Paragraphs/illustrations are evaluated for accuracy of information and appropriate vocabulary.

Extension/Simplification:

In the computer lab, or as homework, instruct students to locate on the Internet terraced farming photographs from countries other than East Asia. They will each prepare a short photo gallery (PowerPoint) for the class. Give them time to show their galleries and allow the class time to discuss whether these locations could be replicated in the United States.

For special needs classes, assist students in locating the different East Asian countries where terrace farming is practiced. As a class, label a projected map (or a large one you have traced and posted on the wall) with each country as they locate them on their desktop maps. You can also print out several of the slideshow photos from each country so students can tape them to the posted map as they are located. Once your slideshow has been shown twice, assist students in

listing vocabulary needed for their paragraphs. These terms should go in their notebooks with the definition of terraced farming they wrote at the beginning of this lesson.

Teacher Resources: (All links were live as of October 18, 2013)

Desktop maps for purchase available here:

http://www.worldmapsonline.com/us_world_deskmaps.htm

Desktop maps for free download available here:

http://education.nationalgeographic.com/education/maps/world-political-mapmaker-kit/?ar_a=1

Terrace Farming: A Unique Agriculture Solution:

<http://www.socialstudiesforkids.com/articles/geography/terracefarming.htm>

A short explanation of terraced farming:

<http://www.howitworksdaily.com/environment/question-of-the-day-what-is-terrace-farming/>

Slideshow of photos showing terraced farming in the Philippines, China, Japan, Indonesia, Viet Nam, and Peru [Click on the first photo to enlarge, continue to click to advance through photos. Also, note there are numerous misspelled words in this web site.]:

<http://pcgladiator.blogspot.com/2009/03/agriculture-terraces.html>

Additional photos of terraced farming in China and Japan:

<http://www.amusingplanet.com/2011/09/beautiful-pictures-of-rice-terraces.html>

Video:

Dazhai Spring Planting 2006 (7:38) - Demonstration of how the terraces are prepared, how the seedlings are planted, tools needed for spring rice preparation and planting, and how tourists can view this planting.

<http://www.cleanvideosearch.com/media/action/yt/watch?v=MXqTil6KpNw>