



ELL Adaptation For A Region in My Own Backyard: A Geographic Field Study

Students learn about the geographic theme of region while tracing the changes in a tree over a period of time.

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Grade Level 6-8
Duration 3-4 Class Periods

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SIOP Elements		
Preparation Adapting content Linking to background Linking to past learning Strategies used	Scaffolding Modeling Guided practice Independent practice Comprehensible input	Grouping Option Whole class Small groups Partners Independent
Integrating Processes Reading Writing Speaking Listening	Application Hands on Meaningful Linked to objectives Promotes engagement	Assessment Individual Group Written Oral

TESOL Standard(s)

ESL: English For Content
Through The Use Of ESL Methodologies, The Student Will:
EFC-A. Create, read and interpret visual information relating to science, social studies and math.
A1. Draw and label maps.
EFC-C. Compose in a variety of forms.
C3. Write descriptions using Math, Science, and Social studies target vocabulary.

Arizona ELP Standards

ELL Stage IV
Basic
Writing
Standard 4: The student will integrate elements of effective writing to develop engaging and focused text. The student will integrate elements of effective writing to develop engaging and focused text as demonstrated by:
B-1: writing text that incorporates details.

Overview

This lesson is designed to help students conduct a geographic field study of their schoolyard eco-region, and interpret geographic information through maps and math estimations. Students will also practice personal narrative writing.

Key Vocabulary

Clinometer - A device for measuring angles

Sketch - A simple drawing

Bark – The external coverage of wooded stems

Deciduous - Trees that shed their leaves every year

Plot - A measured piece of land

Coniferous - Trees that have pinecones and pine needles all year

Worry – To feel troubled

Wonder – To not know for sure

Hear – To use your ears

See – To use your eyes

Cry – To have water fall from your eyes

Touch – To use your hands

Feel – Emotion that you are experiencing

Additional Materials Needed for ELL

- “I am” poem template

Procedures

1. Have the students discuss the landscape of a familiar place: a student’s home, neighborhood, local park, or local shopping mall. Focus on both the physical and human features that define these places. Review the geographic theme of PLACE – the unique characteristics that define a particular location and answers the question: What is it like there? **(Preparation: Linking to past learning, background)**
2. In a similar fashion, discuss the landscape of the school campus. Ask students to think about how the landscape of the campus has changed over time and about the indigenous (natural) landscape that existed in the region BEFORE urban development. Review the geographic theme of REGION – the similar or unifying characteristics of an area that allows geographers to define it as a region. Have students identify their physical region of residence, such as: the Sonoran Desert, Mogollon Rim, Colorado Plateau, White Mountains, Riparian River, etc. **(Preparation: Linking to past learning, background)**
3. Explain to students that they will participate in a field study of a small region, called a vegetarian plot, on their campus. This will require them to adopt a tree, examine it, and record changes over a period of time. **(Scaffolding: Comprehensible Input)**
4. Distribute the “Type your tree” worksheet and discuss Questions 1-9. Focus on related vocabulary & concepts such as: deciduous vs. coniferous, tree bark, leaf sketches, primary sources of water, and natural vs. transplant. **(Scaffolding: Comprehensible Input)**
5. Before leaving the classroom, divide students into groups of two. Explain that student pairs will “adopt” a tree on campus, give it a name, and examine their tree, using questions 1-9 on the “Type your tree” worksheet. NOTE: Question 10 cannot be accomplished until further instruction is given regarding methodology for measuring tree height. **(Grouping: Partners; Scaffolding: Comprehensible Input)**
6. Distribute the “Measuring Tree Height” worksheet. Have students read the instructions on the 5 different methods for estimating tree height. Introduce students to the measuring materials (the measuring tapes, sighting sticks, and clinometers) and demonstrate how to use them. NOTE: If sighting sticks and clinometers are unavailable, the teacher will only be able to utilize the first three methods of estimation. **(Scaffolding: Modeling)**

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7. Have the student pairs further examine their tree, using Questions 10-12 on the "Type your Tree" worksheet. (**Scaffolding: Guided practice**)
8. Distribute the "Tree Base" worksheet and discuss the procedures and observation strategies involved. Have the student pairs plot a 6-foot square grid around the base of their tree and divide the grid into four quadrants, following the cardinal directions. Students will further examine their schoolyard eco-region and record their observations on the "Tree Base" worksheet.
9. Have the students draw a map of the campus, identifying the location of their tree (**Application: Hands on, meaningful**)
10. Every eight weeks have students perform the field study procedures and worksheet.

Assessment

Each of the worksheets and the schoolyard map will be evaluated on the basis of completeness and accuracy. Points should be assigned for each item at the discretion of the teacher. The writing assignment will be assessed on the traits of ideas, voice, and word choice using the Six-trait Rubric. Mastery will be considered 4 or higher.

ELL students must complete "I am" poem as their assessment.