Evaluating, Using, and Creating Maps That Tell the Story

Author Grade Level Duration Barbara S. Williams High School 3 class periods

National Standards

GEOGRAPHY Element 1: The World in Spatial Terms

1. How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information

AZ Standards

ELA

Reading

Key Ideas and Details

9-10.RI.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

11-12-RI.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. **Writing**

Production and Distribution of Writing

9-10. and 11-12 W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Arizona Social Science Standards

GEOGRAPHY

The use of geographic representations and tools help individuals understand their world. HS.G1.1 Use geographic data to explain and analyze relationships between locations of place and regions. Key tools and representations such as maps, remotely sensed and other images, tables, and graphs

Overview

Maps are a useful means of communicating a large amount of information. Good maps do this. Poor maps can be misleading, untruthful, and inadequate. Understanding the difference in quality of maps is important life skill.

Purpose

In this lesson students will learn to evaluate maps, use various kinds of maps, and create simple maps. In doing so, they will improve their ability not only to transmit geographic information but to communicate in many other ways.

Materials

- Graph paper
- A wide a variety of maps from different sources
- Scoring Guide for Map of a Favorite Place

Objectives

The student will be able to:

- 1. Identify the elements of a well-constructed map.
- 2. Construct a map exhibiting these elements.
- 3. Write good directions.

Procedures

Prerequisite Learning (encouraged but not required): Students should have participated in the lesson called DOGSTAILS: An Introduction to Map Reading found at http://geoalliance.asu.edu/dogstails or already know the basic elements of a good map.

SESSION ONE

- 1. Begin by asking, "Why do we use maps?" Solicit their responses and write them on the whiteboard.
- 2. Now give the students 15 minutes to look at a wide variety of maps. This variety should include National Geographic maps, city maps, historical maps, road maps, atlases, maps from current publications and brochures from national/state parks and museums that include maps.
- 3. Model a tool such as the one included in the DOGSTAILS lesson to evaluate one of the maps in the group of maps. Then have the students take one of the maps they examined earlier and have them evaluate this map using the tool you have selected.
- 4. Initiate a class discussion focused on why certain elements are essential to the quality of a map.
- 5. Conclude class by having the students to draw (independently) a simple map of the classroom keeping in mind the elements of a maps that they



thought were the most essential. They will then trade maps and evaluate the accuracy and effectiveness of the maps.

SESSION TWO

- 6. Ask the students to write a set of directions for someone to follow describing the route he/she took from home to school today.
- 7. Distribute graph paper. Now have them draw a map showing the route he/she took today from home to school. Allot about 10-15 minutes for this activity and stop students who are still working.
- 8. Have students trade their directions and their maps with another student. After the partners have read both the directions and the map, ask, 'Which set of directions you could follow best?" Have each partner take turns sharing the exemplary characteristics and the shortcomings of the written directions and the map with its author.

SESSION THREE

9. Ask students to create a map of a favorite place, real or imaginary, using graph paper. Remind them to include all the map elements that they have learned about and to be as detailed as possible by sharing the scoring guide.

Assessment

Geography and Reading

Tool used to assess the elements of the map can be scored for completeness and correct information. Mastery will be considered a score of 80% or higher.

Geography and Writing

Maps can be graded using the Scoring Guide for Map of a Favorite Place. Mastery will be considered a score of 80% or higher.

Set of directions can be graded using the 6 Traits Writing Rubric focusing on Ideas and Content. Mastery will be considered a score of 4 or higher on the rubric.

Extensions

Take students on a walk around the school. Tell them they will have to map the areas they explored. Work with an English teacher to have them draw maps of a site in a piece of literature they have read. Create a cartography show in the library using these maps.

Sources

DOGSTAILS: An Introduction to Map Reading found at http://geoalliance.asu.edu/dogstails

