

NEH Hudson River Workshop Lesson Plan 2013

Teacher: Kevin Koppelman

Subject: Biology

Grade Level: 9th-10th Grade

Summary:

This is an interdisciplinary Lesson that incorporates Art and the Scientific Method. Students use descriptions of landscape pictures/paintings to discover the impact interpretation has on scientific recordings. Students discover the importance of properly describing scientific discoveries.

Submitted by: Kevin Koppelman

Date: July 28, 2013

Grade Level(s): 9, 10

Subject(s): Biology

- Science Inquiry

DESCRIPTION: Mystery Paintings

BACKGROUND INFORMATION: This activity can be used in the middle of a lesson on science inquiry. Be sure to find detailed paintings of local landscapes with large and small details. Use Cole's painting of the waterfall (Falls of the Kaaterskills) to explain how artist often take privileges with what is actually there. I am going to use Cole's picture of Niagara Falls next to the picture I recently took of the Falls. This will be used before my mystery cups lesson using all senses to describe observations. Lesson inspired by NEH Hudson River Workshop 2013

Time: 1 class period about 50 min

GOAL: The students will observe the differences in objects using art of specific landscapes.

CONCEPTS: Students will be able to:

1. Set up and observe the differences in objects.
2. Use vision and imagination to make observations.

MATERIALS:

Thomas Cole paintings- http://en.wikipedia.org/wiki/Thomas_Cole

Lewis and Clark journals

Local paintings- <http://mdc.mo.gov/newsroom/discovery-center-hosting-exhibit-landscape-artist-thomas-cole>

Blank copy paper

PROCEDURE: Mystery paintings

This is a short lesson that students can have a lot of fun with, and illustrates the scientific method of recording. You will need to print off at least 3 different color paintings of landscape, placing A,B,or C on the back. Have students describe the landscape that is placed on their table. After about 3 min collect the different art from the tables have 1 table trade descriptions with a table that had a different landscape. After 3 min have the tables discuss how they interpreted the description. Allow 3 min for discussion and then 3 min to finalize what you think was described. Start assessment.

ASSESSMENT:

1. Discuss students' guesses about the descriptions given by other students.

2. Look at each other's drawings from descriptions given
3. Discuss why they drew different pictures than classmates described. How can this affect scientific recordings?
4. Why is it important to collect or properly describe scientific discoveries?

Homework:

Have students take a picture overnight of a landscape to place into their electronic journal. They will also describe what was going on when taking that picture.