Agriculture and Technology Through Works of Art

Art of Collaboration Project

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July 29, 2009

Agriculture and Technology Through Art

Introduction: Both of the works of art that are shown below can be used to engage students in a lesson about agriculture and the effects technology has had on agriculture over time.

**Grade Level**: 6th

**Subject Areas:** Science and Visual Arts (Also has connections to Social Studies and Language Arts.)

**Learning Outcomes:** After this lesson students will be familiar with the ways in which technology plays a critical role in agricultural development. Students will be able to identify problems that relate to overuse of land.

**Curriculum Alignment:**

6th Grade Science, Goal 2, Objectives 1 and 2 (Technological Design)

6th Grade Science, Goal 3, Objectives 6 and 8 (Human impact on Earth and health of environments)

6th-8th Visual Arts, Goal 5, Objectives 1 and 5 (Arts relating to history and culture)

**Classroom Time Required:**

One 90 minute class period will be needed.

**Materials Needed:**

A digital or hard copy of the following works of art:

*A field of cut burley tobacco* by Rob Amberg

*Jim Smyre and family planting tobacco* by Rob Amberg

**Technology Resources:**

Any means you have available to display the works of art. A smart board would be ideal but you can also use a computer with projector or even an overhead projector.

**Pre-Activities:**

**Teachers:**

Have copies of works of art and a way to display them.

**Students:**

Students should be familiar with technology and know what constitutes as technology.

Students should be familiar with soil uses and erosion.

Students should be familiar with culture.

**Activities:**

* Teacher should first show both works of art. (No more than 10 minutes total)
* Students should be made aware of the date each was taken.
* Teacher should lead a discussion about the works of art using the following questions: (No more than 40 minutes total)
  + Is technology present in both of these pictures? Explain
  + Name all of the types of technology that are present in the pictures.
  + What is a Gelatin-silver print?
    - * This is the process currently used for black and white films and printing papers. A suspension of silver salts in gelatin is coated onto glass, plastic, or some type of coated paper. It was introduced in 1871 by R.L. Maddox.
  + How have people impacted these settings?
  + What would be some of the results of overuse of this land?
    - After this discussion, students should have a better understanding of how technology impacts agriculture and land use.
  + Why is the ability of art being able to “capture” a moment in history important?
  + How do these works by Rob Amberg do this?
  + What can you infer about the culture represented in these pictures?
  + How has the change in acceptance of tobacco use impacted the tobacco growing industry?
    - After this discussion, students should understand the economic interdependence of farmers, technology, and a changing market.
  + What leads you to make this inference?
    - After this discussion, students should have a better understanding of how history and culture can be shown through works of art.
* Give students a chance to share any questions or thoughts that they may have.
* Give students the assessment worksheet to complete.

**Assessment:**

* Teacher should monitor discussion to ensure that every child participates and has an understanding of the goals for this lesson.
* After discussion, students should complete Agriculture and Technology Worksheet.

**Modifications:**

* All students should be able to participate in the discussion in class. The teacher can direct simplified questions to lower level or English Language Learners if they have not responded to the other discussion questions. Examples of these types of questions are:
  + What is tobacco commonly used for?
  + Why do you think we see more soybean crops grown now than tobacco?

**Supplemental Information:**

Rob Amberg’s Website: <http://www.robamberg.com>

**Critical Vocabulary:**

Technology, Erosion, Natural Resource, and Soil Conservation.

**Suggestions for Cross-Curricular Connections with Lesson Ideas:**

* **Social Studies**:

13.01, 13.02, 13.03 (Historic and economic connections between NC and world)

Discussion questions for this social studies goal and these objectives:

1. The first picture was taken in 1993 and the second in 1987. How would you expect these pictures to be different if they were taken today?
   1. Why do you think these changes would occur?
2. How did tobacco growth in NC impact our trade with the U.S. and the world?
   1. How has this changed in the past 25 years? Why?

Lesson suggestion: Have students work in groups of 3 - 4 to research the changes in North Carolina’s role in the Global Economy over the past 25 years. These groups will focus on the causes of these changes and the effects these changes have had on our state. Each group should research alternative types of agriculture that could be grown in our state. Each group should choose one new agricultural product that could be produced in our state and prepare a “sales pitch” to the class about how this would benefit our state and help us become more competitive in the global market.

* **Language Arts:**

1.02 (explore materials that are viewed)

Discussion questions for this language arts goal and objective:

1. What do you see going on in these pictures?
   1. Which picture is easier to understand? Why?
2. Could these pictures be considered “expressive works”? Why or why not?
3. Do these pictures tell a story? If so, what aspects of the pictures tell the story?

Lesson suggestion: Have students write a story that they feel could be illustrated by these pictures. Students can share their stories with the rest of the class.

**Works of Art to be Used Including the Wall Descriptions That Appear in Museum of Art:**

Agriculture and Technology



Rob Amberg (American, 1947 - )  
*A field of cut burley tobacco*, 1993; printed 2002  
Gelatin-silver print  
1ft 0in x 1ft 6in (30.5cm x 45.7cm)  
Gift of the artist, 2004 (2004.8.12)  
© 2006 photograph by Rob Amberg

Wall Description:  
Rob Amberg has documented the culture and characters of the North Carolina Mountains for over two decades. From the *Sodom Laurel Album* series, *A field of cut burley tobacco* provides a glimpse into operations at Dellie Norton's tobacco farm in Sodom Laurel, North Carolina. Amberg uncovers the quiet artistry of a field full of harvested tobacco gathered onto [tobacco sticks](JavaScript:OpenGlossaryWindow(%22346%22)) to await curing.



Rob Amberg (American, 1947 - )  
*Jim Smyre and family planting tobacco*, 1987; printed 1992  
Gelatin-silver print  
11in x 1ft 5in (27.9cm x 43.2cm)  
Purchased with funds from the William R. Roberson, Jr. and Frances M. Roberson Endowed Fund for North Carolina Art, 2004 (2004.8.2)  
© 2006 photograph by Rob Amberg

Wall Description:  
In his ongoing series *Vanishing Culture of Agriculture*, Rob Amberg documents the effects of change and technology on small family farms. For over 25 years, Amberg has visited small farms throughout the South and captured farmers and their families at work and at play. *Jim Smyre and family planting tobacco* shows a family riding a tobacco setter as they transplant seedlings into the field.

**Another Work of Art That Can Be Used in this Lesson:**



Jean-François Millet (French, 1814 - 1875)  
*Peasant Spreading Manure*, 1855  
Oil on canvas  
2ft 8in x 3ft 8in (81.3cm x 1m 11.8cm)  
Purchased with funds from the North Carolina Art Society (Robert F. Phifer Bequest), 1952 (52.9.128)

The son of farmers, Jean-François Millet was devoted to cataloguing aspects of peasant life and preferred the village existence near the Forest of Fontainebleau to the art world of Paris. Unlike the Impressionists, who began to paint about a decade after this work, Millet made several preparatory drawings for figures such as the farmer in his wooden shoes. Though he represented his subjects with dignity, his views present a life of struggle and toil. "It is never the cheerful side of things that appears to me," he wrote of his work. By the late 1870s, Millet and the like-minded painters known as the Barbizon group were gaining acceptance in exhibitions, with collectors, and in the eyes of the young Impressionists, who admired the naturalness of their landscapes.

**Extensions to Lesson:**

Have students compare the time periods of these works. When do you think this work was painted? What clues in the painting make you think it was painted at that time? What forms of technology do you see in this work? How is the technology between the work by Millet and the works by Amberg similar? How is it different?

Have students compare the changes humans have made in this landscape. In which work of art do you think humans have had the most impact? Explain.

**Author Info:**

My name is Kristen Hensley. I teach at Bunn Middle School in Franklin County. For the past 6 years I have taught 6th grade Science and Social Studies. I am a National Board Certified Teacher and a Kenan Fellow. I developed this project through my Kenan Fellowship, The Art of Collaboration. I have designed lessons that help teachers integrate art into science lessons. Through this project I have found that integrating art into science is much easier than I first thought. The lessons are very engaging and the students love them.

Through the Kenan Fellowship program I work with a mentor from the North Carolina Museum of Art. My mentor is Jill Taylor. She works with the Art of Collaboration project at the museum. This program works with teachers from different school systems in the state and helps them to learn how to integrate art into their subject areas.