

Lesson Overview

In this lesson, students watch the segment featuring the Gee's Bend quilters and The Oriole Mill from Craft in America's INDUSTRY episode, which explores the skilled craftwork required to make Gee's Bend, Alabama's quilts and The Oriole Mill textile factory of North Carolina with its various forms of fabric design and construction. Students will consider ideas of hand work, time invested in creating art, the marketing of textiles, and humans' use of textiles.

Students will practice their choice of quilting, weaving, sewing, or knitting, and then design and create fabric squares for pieced textiles. Through this work, students will determine their own perceptions of the value of handwork, time, marketing, and their daily use of textiles. Students may work as a group or individually on their textiles.

Key Concepts:

- From infancy, we are connected to textiles on a daily basis.
- Artists often choose to use hand work combined with machine work.
- In craft work, the value of time can be measured in different ways.
- The location of a craft tradition may be used as a marketing strategy.

Critical Questions:

- In what ways do humans rely on textiles?
- How do makers decide when to use handwork and when to use machine work?
- What is the importance of time in craftwork, and how does the monetary value of that time vary?
- How can the location of a craft tradition be used as a marketing strategy?

Objectives

Students will:

- Describe their personal connection to textiles.
- Compare and contrast ideas about the value of time and handwork related to crafted and manufactured objects.
- Analyze examples of location as a marketing strategy, and find examples in their community.



• Design and construct a pieced textile.

National Standards for Visual Arts Education

This lesson addresses the following standards. The performance standards listed here are directly related to the lesson's goals.

- 1. Understanding and applying media, techniques, and processes
- 4. Understanding the visual arts in relation to history and cultures
- 5. Reflecting upon and assessing the characteristics and merits of their work and the work of others

If Interdisciplinary Connections are incorporated, Standard #6 will be covered:

• 6. Making connections between visual arts and other disciplines

Student Worksheets

- Time, Value, and Place: Ideas About Textiles
- A Collection of Squares: Making a Textile

Interdisciplinary Connection

• History/Social Studies:

Explore the history of Gee's Bend, Alabama, through Auburn University's website: auburn.edu/academic/other/geesbend/explore/history.htm

Other websites: encyclopediaofalabama.org/face/Article.jsp?id=h-1094

Study the history of the United States textile trade: athm.org/collections
textilehistory.org

• Science and Technology Education:

Electric sewing machines and non-electrified flat-bed knitting machines are two useful studio tools. Both are machines that allow exploration of simple non-digital mechanisms (although computerized versions of both are available.) Understanding how these machines work, especially regarding the timing of the various components, can be an interesting lesson, as well as an introduction to more complex industrial processes. Sturdy older machines can be found in the second hand market for reasonable prices. Additionally, old treadle-base sewing machines, non-electrified and operated by foot pedal, allow students to use an historical artifact. These machines are widely available in functioning condition for prices under \$200. Sewing machine attachments that automatically fold, gather, create buttonholes, and more are additional intriguing objects for exploring mechanicals.



Regarding knitting machines, a punch card machine that mechanically selects the needles for patterning (similar to a player piano) is another potential studio appliance. These are available secondhand for under \$1,000. The punch card machines are reminiscent (though they knit rather than weave) of the jacquard looms at The Oriole Mill that automatically create patterning. Industrial Jacquard looms were the inspiration for the first punch card based computer systems. Read about the Jacquard looms of Joseph Marie Jacquard, and the early punch card extensions (that led to the development of computers) of Charles Babbage and Herman Hollerith:

Lia Cook on her Jacquard loom: craftinamerica.org/short/lia-cook-on-her-jacquard-loom history-computer.com/Dreamers/Jacquard.html en.wikipedia.org/wiki/Joseph_Marie_Jacquard inventors.about.com/library/inventors/blhollerith.htm

• Mathematics: Designing patterns on graph paper, weaving, and knitting are all processes that use math in embodied problem-solving. Designing on graph paper involves the use of spatial reasoning and playing with fractions in a visual format. Weaving uses repetitive number patterns (and inventing such patterns) to create designs. Knitting uses number patterns, counting, multiplication, and division in the creation of fabrics.

Materials

- Images of the Gee's Bend quilts, Joe Cunningham's quilts, and The Oriole Mill's product line for student inspiration and reference.
- Have students do an internet search for images of other patchwork quilts and what Libby O'Bryan might describe as "hearty American textiles"; that is, manufactured textiles made in the United States, such as blankets, jeans, and other mill-made products. Print the images for class reference.
- Access to online resources for research
- Drawing paper and graph paper
- Pencils, erasers, rulers, markers, and other drawing tools
- Sewing Machine: The heavy, metal-based but portable machines of past decades
- are extremely sturdy, and can be found at second hand stores and yard sales for \$20 to \$200 dollars. Enlist a knowledgeable stitcher to help locate one; two machines are better for an eager class of students.
- Simple pot-holder looms, as many as you can gather (students might have their own.) These inexpensive plastic or metal looms can be used with yarn and other fibers (besides the potholder loops they are normally used with.) String them in one direction to weave a plain or tapestry pattern.
- Sturdy cardboard and/or picture frames for making alternate looms.
- Weaving needles: long, large needles with a large eye for yarn.
- Fabric scraps
- Hand sewing needles



- Threads: embroidery floss, sewing thread, and quilting thread
- Yarn, string, and other assorted fibers
- Knitting needles, especially larger sizes of 6 and up.
- Quilt batting: polyester batting, flannel, or other soft fabric for the filling between the quilt's face fabric and backing fabric.
- Optional: A small table loom to try weaving. These are available online.
- Optional: A flat-bed knitting machine is another mechanical way of creating fabric, and not
 often found in an art class. You may want to add one to outfit a textile studio in the art
 room. These vary from featuring one basic stitch (stockinette) to mechanical punch card
 machines, which imitate the jacquard looms of The Oriole Mill and create automatically
 patterned designs (though the process is actually knitting, not weaving as in the jacquard
 looms.)

About the Artist

INDUSTRY features Gee's Bend quilters Lucy Mingo and Mary Ann Pettaway as well as San Francisco quilter Joe Cunningham. By exploring how various quilts are designed and made, INDUSTRY offers viewers a unique journey through our country's past, detailing the contributions of quilters throughout our history.

"Quilting on your hand looks better to me than quilting on the machine. See, quilting on the machine, you can do that anytime but you have to take time and do it real well with the hand."

— Lucy Mingo

INDUSTRY also focuses on The Oriole Mill textile factory as a craft art studio and western North Carolina artists such as Bethanne Knudson who contribute to The Oriole Mill's product line.

"I think textiles are often underappreciated, because they are so much a part of almost every moment of our daily lives. Right at birth we're wrapped in cloth, or at least historically we were, and for burial we're wrapped in cloth. So really from cradle to grave cloth plays a very ever-present part in our lives." — Bethanne Knudson