



LESSON PLAN

Rethinking the Fabrics We Wear



RELATED PHOTO ESSAY

The Art of Making Wool

BY MARK ANDREW BOYER



Rethinking the Fabrics We Wear

Key Idea

Local textile cultures called “fibersheds” offer an alternative to mass production by seeking to utilize regional agriculture, enhance ecological balance, and strengthen communities.

Background

This photo essay, which includes audio recordings, depicts life on Mimi Luebbermann’s Windrush Farm in Chileno Valley, California, where she raises sheep and educates the public about wool and fiber arts.

Luebbermann supports the creation of local textile cultures called “fibersheds.” A fibershed is a geological region where one can source all the fibers and dye plants to create their own garments. According to fibershed.com, in 1965, 95 percent of clothing in the American closet was made in America. Today, less than 5 percent of our clothes are made in the U.S. Most American clothing is mass-produced and sourced outside of the U.S. in order to bypass policies, unions, and costs. After agriculture, the textile industry is the number one polluter of fresh water resources on the planet, mainly due to hazardous fabric dye runoff.

Wool, unlike other fibers, does not require pesticides for growing or chemicals for processing. As a natural fiber, wool insulates and pulls moisture away from a surface as well as offers a tactile sensation incomparable to synthetic fibers. Luebbermann co-founded a wool Community Supported Agriculture program (CSA), called Local Pastures, which supplies knitters with yarn from shepherds within a 150-mile radius.

Connections to National Standards

Common Core English Language Arts. SL.9-10.5 and SL.11-12.5. Make use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understandings of findings, reasoning, and evidence and to add interest.

College, Career, and Civic Life (C3) Framework for Social Studies State Standards. D2.Geo.2.9-12. Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions and their political, cultural, and economic dynamics.



Class: 60 minutes
plus time for students to collect samples of natural and synthetic fibers

SUBJECT AREAS

HIGH SCHOOL

- Art
- Environmental Science
- Modern World Studies
- Photography

COLLEGE

- Art
- Environmental Studies
- Photography

THEMES

- Locally made
- Self-reliance and resiliency
- Sustainability
- Natural versus synthetic

MATERIALS

- Access to the photo essay online (or printed copies of it)

PREPARATION

- (Optional) Make copies of the photo essay



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Next Generation Science Standards. HS-LS2-7. Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.

Lesson

SETTING THE STAGE

Introduce the photo essay by asking students to think about the clothing they wear. Do they know what types of fabric their clothing is made of? Ask students what they know about natural and synthetic fabrics. Natural fabrics are made from fibers that come from an animal or vegetable. Scientists invented synthetics. Ask students to bring to class one sample of a natural fabric and one sample of a synthetic fabric.

Some natural fabrics include:

- Angora
- Cashmere
- Cotton
- Linen
- Silk
- Wool

Some synthetic fabrics include:

- Acetate
- Acrylic
- Nylon
- Polyester
- Rayon
- Spandex



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ENGAGING WITH THE STORY

Explain that students will be viewing a photo essay that highlights a sheep farmer, Mimi Luebbermann, and the wool that she spins. Direct students to view the photo essay and listen to the audio in pairs or groups of three. Explain that students should observe the characteristics of wool described by Luebbermann in the photo essay.

Delving Deeper

After viewing the film, lead a discussion with such questions as:

- In the photo essay, Luebbermann says: “Fiber is so tactile and people are so hungry to touch real fiber. It’s as if the cells know the difference between polyester and wool off a sheep’s back.” What do they think Luebbermann means by “the cells know the difference”? In groups of three, invite students to share their fabric samples. Ask students what they notice when they compare the natural and synthetic fabrics. How do the different fabrics feel different to the touch? Do they know the original source location of the materials?
- “Unlike other fibers, sheep’s wool doesn’t require pesticides to grow or chemicals to process,” reads one of the photo’s captions. What could be the effects of chemicals in our clothes? How might they threaten one’s health?
- What are the benefits and drawbacks of raising sheep and making wool? What do you think society could gain if more people like Luebbermann educated the public about wool and fiber arts?
- If you could rename the photo essay, what name would you give it?

Reflecting and Projecting

Give students one of the following reflective writing prompts to demonstrate their understanding of the story. (Note for teachers: Just as quotes from a book or text are used to prove an analytical thought, students use the photo essay to justify their reasoning.)



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1. “Anything that I make from scratch is very appealing,” says Luebbermann, “I went overboard. I bought a farm so I could raise the sheep, so I could spin the wool and knit the sweaters.” How do farmers, like Luebbermann, who employ low-technology methods, contribute to reducing the impact of human activities on the environment? (NGSS.HS-LS2-7)
2. “Knowing where your fiber comes from is just as important as knowing where your food comes from,” says Luebbermann. Divide students into five groups. Ask students to examine the tags on the shirts they are wearing. What is the country of origin? Write the names of the countries on the board. Assign each group to view one of the five chapters from [NPR’s “Planet Money Makes A T-shirt” project](#), which follows the global journey of a t-shirt and how it is made. Chapters are short videos titled: Cotton, Machines, People, Boxes, and You. Ask students if this resource changed their thinking about t-shirts. Why or why not? Ask one member of each group to share his or her insights with the class. (C3.D2.Geo.2.9-12)
3. “People don’t realize that as much as they’re hungry for real food, they’re hun-gry for real fiber,” says Mimi. What do you think she means by this statement? Has your thinking about the value of natural fibers changed? If so, in what ways? (CCSS.ELA.SL.9-10.5 and SL.11-12.5)

Resources

[“What is a Fibershed?”](#) Fibershed.

Leilani Clark and Nicolas Grizzle, [“Farm-to-Closet Fashion.”](#) *Bohemian*, June 5, 2013.

Grace Bello, [“Rebecca Burgess’s Fibershed: A Model for a Local Textile Economy.”](#) *The Atlantic*, October 13, 2011.

[NPR: Planet Money](#), December 2, 2013.