STEAM LESSON PLAN

Created by Julie Daigle, Josie Langbehn, Carter Leeka, Sue Oles, Trever Reeh & Laura Huntimer
Grade Level Middle school (adaptable for lower and higher grades)

INSPIRED BY Sheila Hicks, Mandan Shrine

PROJECT TITLE: Art of Fiber

DRIVING QUESTION
How does fiber connect us, and what is its influence?

STUDENT LEARNING OBJECTIVES: Put these on the board or have students write them in a notebook/journal.

- I will create my story in a textile artwork.
- I will respond how artists find inspiration for their work.
- I will present research on different fibers.
- I will connect with other cultures through fiber art.

CONTENT STANDARDS
NEBRASKA CONTENT AREA STANDARDS
IOWA CORE STANDARDS

THE FOUR C’S FOR STEAM CAREER READINESS SKILLS

- Critical Thinking: students will examine how fiber influences their world.
- Creativity: students will demonstrate their creativity when making fiber-based art
- Collaboration: students will work together for on an initial bundle project.
- Communication: students will study fiber and present their research to each other.

VOCABULARY: fabric, fiber, influence, inspiration, installation, medium, minime, mummy bundles, pioneer, textile

RESOURCES: Hicks Teaching Poster; Hicks Pinterest board; Nelson Teacher Resource Center

- Video - How Yarn is Made: How Yarn is Made from Raw Fibers: Episode 1, Crochet Crowd, YouTube
- Video - Mary Zicafoose talks about how looking at the of others inspires her, NebraskaArtists.org (including Sheila Hicks)
- Video - Mary Zicafoose talks about becoming a weaver, NebraskaArtists.org
- Video - Artist Spotlight: Sheila Hicks, The Duke Endowment, YouTube
- Preview all videos before sharing with students.

- Resource - See/Wonder/Connect, Artful Thinking | Project Zero, Harvard Graduate School of Education
PROCEDURE
Overview: Through this lesson students will discover how artists, like Sheila Hicks, use fiber as their medium in addition to the functional uses of this material.

Engage: Give students a small strip of fabric and ask them to write something nice on it. It could be about themselves, their class, their friends or family. You can decide if you want the to share or keep their words private. Then find something to wrap, and have students take turns wrapping them together in a bundle.

Ask students...
• What are things you wrap?
• Why is important to write down your thoughts?

Show students Hicks' *Mandan Shrine* and talk about how the artist is a fiber arts pioneer.

Ask students...
• What are things you wrap?
• What does it mean to be a pioneer?
• What is a shrine?

Deliverables: Tell students they will...
• Develop color palettes for other countries and parts of the world
• Explore and teach each other about different fibers
• Make a mini loom to create small weavings
• Tell their story with a textile artwork.

Art Talk: Hicks' pulled the title from a watercolor by Swiss-born artist Karl Bodmer in the Museum's collection. Created almost 200 years apart, compare and contrast the two works using the See/Wonder/Connect method (Artful Thinking | Project Zero, Harvard Graduate School of Education). We suggest starting with the Bodmer work.

Ask students...
• What is a shrine?
• What does it mean to be inspired?
• Why do you think Hicks was inspired by this work?
• What inspires you?

Description of Activity:

What is fiber? Show some images (choose based on grade level) and introduce fiber.
• Look around the room and identify the material.

Are all fibers created equal? Start with the basics and explore the three types of fiber: plant, animal, and synthetic.
• Study how fiber becomes yarn or textiles that artists like Hicks employ in their work.
• Divide students in groups to study specific fibers and then give them the opportunity to teach each other.
• For older students, you can explore fiber optics, like Google fiber, to understand how fiber can be used for communication.
Explore South and Central America as Hicks did. She was inspired by the color palettes and have students identify those vibrant colors.

- Provide a variety of yarn and have students create their own color palette that reflects what Hicks was drawn to or perhaps a place that they are drawn to.
- This could provide opportunities to explore other cultures to develop color palettes, using yarn, to represent each one.

Return to the bundle created in at the beginning of this lesson. Hicks was drawn to pre-Incaic "mummy bundles," which are colorful woven cloths that ancient indigenous peoples used to shroud their dead.

- Take time to learn more about this and then embark on a project where students can tell their story on fabric
- Using strips of fabric, write words of hope or talk about who they are.
- Rather than a collaborative project, students can wrap, braid, add other materials, like yarn, to create an arwork (share images of Hicks' work for inspiration and to experiment with techniques).

Hicks process and resulting work have a meditative quality and rhythm to it. Introduce students to Nebraska textile artist Mary Zicafoose, discussing their similarities and differences.

- Investigate weaving and how the process has changed and industrialized.
- Share with students how Hicks traveled to Kozhikode, India, in 1966 to work with Commonwealth Trust, one of the oldest hand-weaving factories in the world.
- Take the opportunity to draw connections to music and sequences when studying weaving
- Hicks uses a small "pocket loom" to create her minimes [mih NEEMS] or small weavings. Use the lesson Mini Weaving Looms, created by Kassandra Mayo, to give students a chance to weave using simple materials.

Closing: Hand out fabric and have students share what they learned on the strips. Wrap those strips around the bundle created at the beginning of this lesson. Find a place to display this collaborative artwork in the classroom.

Assessment: Use Think | Pair | Share to review what they learned in this lesson.

**STEAM LESSON PLAN** Joslyn Art Museum uses the Nebraska Department of Education’s STEM Approach as a guide, but we took the liberty of adding the "A" to emphasize the ARTS.

NDE’s STEM Approach reflects an integrated and interdisciplinary philosophy to teaching and learning that emphasizes collaborative school-based, work-based, family-based, and community-based experiences as a context for helping students to master key competencies within science, technology, engineering, and mathematics.

Teaching and learning resources, experiences, and example activities included within NDE's STEM Approach serve as a standards-based framework for supporting the engagement of students in hands-on, authentic, and contextual learning experiences that provide students with the opportunity to learn STEM content while promoting essential career readiness skills, including communication, creativity, collaboration, and critical thinking.

NDE’s STEM Approach strives for compatibility with all content-areas, all grade levels, and all career clusters, not just those traditionally defined as STEM.