Purpose
Youth explore the use of texture and design in two fabric construction methods, weaving and knitting.

Facts to Know
Suggested group size: three to four children per adult volunteer
Time frame: group meeting 30 to 60 minutes
Recommended ages: 5- to 7-year-olds (kindergarten through second grade)
Materials:
- Yarn, assorted colors and textures
- Utility knives
- Glue
- Pencils
- Rulers
- Plarn (plastic bag yarn, optional)
- Fabric strips (optional)
- Brown paper grocery bags (one per member)
- Heavy-duty paper plates (two per member)
- 12- by 12-inch cardstock squares, assorted patterns
- Scissors
- Hole punch

Background Knowledge
Weaving and knitting are two processes of fabric construction. In these lessons, a plain weave and knitting will be used. Knitting uses straight needles (or in this lesson our fingers) to interloop yarns, forming a stretchy fabric.

Weaving requires two or three yarn sets that are interlaced at right angles in repeating patterns. The longitudinal (vertical) threads are called the warp threads. The lateral (horizontal) threads are the weft or filling threads. The way, or pattern, in which the warp and weft threads are woven will affect the characteristics of the cloth.

The plain weave is an over-under-over-under pattern. This over-under-over-under weaving fashion is the foundation of all basic woven fabric constructions.

(Stone, 2003)
Learning Activities

**Do: Getting Started**

**Paper Bag Weaving (15 minutes)**

1. A paper bag will be the foundation for this weaving project. Large, colorful strips of cardstock will be used for weaving.

2. Prior to the meeting, mark a series of vertical lines with a straight edge and pencil on each side of the bag. Start and stop the lines 3 inches from the edges of the bag. Put the bag on a surface safe for cutting. Cut along the lines with a utility knife. Place at least four slits on the wide sides of each bag and three on the narrow sides.

3. Prior to the meeting, cut several strips of colorful cardstock. Strips should be about 3 inches wide. Strips can be cut with scissors or a knife on a cutting board.

4. Each member will need a paper bag and several colorful strips for weaving. Use the following directions:
   a. Take one of the strips. Weave it over and then under the cuts on one side of the bag.
   b. Take a second strip. This time weave it under and then over the cuts on the same side.
   c. Continue weaving the strips until you have filled each side.
   d. You can glue the ends of your weaving strips to the paper bag to finish the sides.

*(Easy Paper Bag Weaving, 2012)*

**Do: Digging Deeper**

**Finger Knitting (15 minutes)**

1. Prior to the meeting, cut 6-foot lengths of yarn. Wind each length into a small bundle.

2. Give each member a small bundle of yarn. Use the following directions:
   a. Tie the end of the yarn to your thumb with a knot.
   b. Hold up the same hand the yarn is secured to, palm facing toward you, fingers spread slightly apart.
   c. Wind the yarn through your fingers, alternating back and front. In other words, the yarn should pass behind your index finger, in front of your middle finger, behind your ring finger and then in front of your pinkie.
   d. Wrap the yarn around your pinkie twice, and then pass it back through your fingers until each finger has two loops of yarn on it. Set the excess yarn down for the moment. The excess yarn should be trailing from the thumb side of your hand.
   e. Slide the bottom loop from each finger up and over the top loop on the same finger, then off to the back of your hand. Start with your pinkie finger and work toward your index finger. You should be left with one loop of yarn around each finger and the beginning of a knitted product hanging off the back of your hand.
1. Prior to the meeting, cut assorted lengths of various colored yarns. Members can experiment with various textures and styles of yarn to add depth and dimension to their weavings. Use the following directions:

   a. Cut the rim off two heavy-duty paper plates to make circles. They should both be the same size.
   
   b. Punch holes around the rim of both circles not more than ½ inch from the edge. The holes should line up.
   
   c. Place one cardboard circle to the side for use later.
   
   d. Draw a small circle in the center of the other cardboard circle. Draw a large circle about ½ inch from the edge of the same cardboard circle. Using a ruler and pencil, draw a wagon-wheel pattern between the two circles on the cardboard circle.
   
   e. Ask an adult to cut slits along the spokes of your wagon wheel using a utility knife. Do not cut past the lines of the small and large drawn circles.
   
   f. Thread a tapestry needle with your first length of yarn.
   
   g. From the back of your circle, pull the yarn through the first slit. Leave a tail several inches long in back.
   
   h. Begin weaving the yarn around your circle, over and under, over and under. Go around as many times as you would like.
   
   i. Secure the start and end tails of this yarn with a knot on the back of your circle.
   
   j. Continue with the next yarn color. You may weave over and under the same spokes or alternate and weave under and over the opposite spokes.
   
   k. Repeat the over and under, under and over weaving until you’ve filled your circle.
   
   l. Place the other cardboard circle over the back of your weaving, bad sides facing together. Line up the holes.
   
   m. Stitch a piece of yarn into the hole punches to finish your woven sun. Leave a tail of several inches at the start and end. Tie the tails ends together to make a hanger.

(Amidst the Rain a Woven Sun, 2011)

3. Help members tie a knot in the collected loops with the tail to secure their work.

4. Help members weave the trailing ends into their finished product. Use a thick yarn needle, if necessary, to give it a finished look.

(Finger Knitting Directions, 2012)
Reflect/Apply

Reflect: Bringing Closure (15 minutes)

1. Make a paper patchwork quilt. Each member should make a square paper weaving using construction paper or scrapbook paper.
2. Members should sign their name in the lower right corner of the square.
3. Secure the individual pieces together to make a large paper quilt. Squares can be secured with tape, or hole punches and woven yarn.
4. Hang the group patchwork quilt on a wall. Ask each member to point out his or her square to the group.

Apply: Going Beyond

1. Use a hoop loom. Have members make large woven suns using embroidery hoops or hula hoops for the frame. The finger-knitting chains are used to weave around and around the hoop.
2. Try kumihimo. To turn an old CD or DVD into a kumihimo disc, select colored threads and a simple pattern to begin.
3. Create a work of public textile art. Have members weave scraps of fabric, plastic and other fibrous materials through a section of chain link fence or snow fence. Experiment with assorted colors, patterns, density and textures. Be sure to name the art installation and place a sign designating the artists’ names and date.

Resources


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For more information, see www.ndsu.edu/4h

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