

Weaving: A Practical Life Experience Within the Cosmic Curriculum

**Presenters: Karen Simon, Linda Sloan - Montessori School of Celebration
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“Human consciousness comes into the world as a flaming ball of imagination. Everything invented by man, physical or mental, is the fruit of someone’s imagination.”

Dr. Maria Montessori, To Educate the Human Potential

A simple search through the history of the art of weaving shows us that it is a craft that has been around since the dawn of humans on earth. Early humans used plant fibers and twisted them to make string, which they later used to weave cloth. Weaving connects directly to the Fundamental Needs of Humans, both as clothing and to fulfill the spiritual need of beautifying one’s space.

“Since it has been ... necessary to give so much to the child, let us give him a vision of the whole universe. The universe is an imposing reality, and an answer to all questions... All things are part of the universe, and are connected with each other to form one whole unity. The idea helps the mind of the child to become focused, to stop wandering in an aimless quest for knowledge. He is satisfied having found the universal center of himself with all things.” (Maria Montessori, To Educate the Human Potential).

The art of weaving serves to give the child an outlet for his/her imagination by learning a skill that goes back in time and crosses cultures around the world.

“Not only can imagination travel through infinite space, but also through infinite time; we can go backwards through the epochs, and have the vision of the earth as it was, with the creatures that inhabited it.” Dr. Maria Montessori, To Educate the Human Potential

Common weaving terms:

Loom: weaving frame, this can be anything from a tree branch to a sophisticated computer controlled floor loom that vertical threads can be attached to.

Warp: The vertical threads on a loom

Weft: The horizontal threads that are woven across the warp using a delivery device (fingers, needles, shuttles)

Weaving pattern: The way that weft is placed across the warp threads

Important tips for successful weaving

A common problem with new weavers is pulling the weft too tightly against the outer warp strings. The graph paper is also a guide for the spacing of the warp threads and lets the weaver visually see the actual distance between their warp threads. If attention is not paid to the turns of the weft at the edges this distance will grow smaller and smaller and an hourglass appearance will take over the edges of the piece. The goal is to maintain a nice vertical edge on both side of the weaving. When weaving leave a slight bubble of the weft yarn at the turn and weave yarn across to other side. Gently pack weft into place starting at the edge where the weft made the turn and moving across to where the needle exited the warp. This allows the weft to cover the warp and not pull in at the edges of the warp.

Paper Weaving (all ages)

The simplest way to introduce weaving into your environment is with paper. Construction paper is a great place to start. Fold in half width-wise and draw straight or curvy lines from the fold to within an inch of the edge. Cut the lines and then weave strips of paper across using plain weave.

Paint two pieces of paper with different color schemes and allow to dry thoroughly, cut each paper into strips of equal or varying widths keeping each stack of strips separate. Lay out one stack as the warp and weave the other through as the weft.

Easy to Make and use looms for the classroom

Materials needed:

- *3/16" or 1/2" foam core board is a good sturdy reusable material for looms
- *Graph paper on a 4 per inch or 5 per inch grid. Use 4pi for beginners, 5pi is good for more complex tapestry style designs.
- *Toothpicks with pointed ends for pouch looms.
- *Box cutter, utility knife, etc.
- *Warp material, strong cotton is best – see supplier list
- *Weaving material – 4ply acrylics, smooth or lightly textured (bulky yarns do not work well on this size loom.
- *Large eye steel tapestry needles are best for weaving and will last for many years in the classroom without need of replacement.

Hardware Wire Weaving (Lower and Upper Elementary)

Hardware wire found at your local Lowes, Home Depot, Farm Supply or Hardware store is used as fencing. It looks like a grid and can be cut with wire cutters into a variety of shapes and sizes and all sorts of materials can be woven through it – let your imagination be your guide.

Bead Loom (3rd years and Upper Elementary)-

Children with developed fine motor skills love Bead Looms. Using graph paper a child can develop her/his own designs and translate them onto the loom. You can use 6/0 seed beads and large eye beading needles with great success. Choose a set of colors and have them available before the designing begins to help control the process. We have found that an eleven bead wide by 6" long design on 8 per inch graph paper (see handout) translates well.

Card Weaving (Upper Elementary/Middle School)

Purchase cards from Earth Guild (supplier list) for this. Each card requires 4 warp threads. Students can design their own pattern or use available designs from books and Internet. Several designs are included in this handout. Earth Guild has a downloadable instruction sheet with excellent directions on their website.

Some important tips:

- Start with a short warp for your first attempt, 30 to 40 inches max.
- Number each card on the front.
- Each card will have an A, B, C, and D hole. Keep all the cards aligned with their corresponding letter on each card and all facing to the right or the left.
- Make sure all the yarns go through the holes from the same side (all from the front side or all from the back side).
- Align all the yarn ends evenly once cards are threaded and tie together with an overhand knot above the cards.

Suppliers

earthguild.com - Knitting and weaving yarns, weaving needles(metal), Maysville 8/4 rug warp, looms
dickblick.co, - Weaving yarns, weaving needles(metal), Maysville 8/4 rug warp, looms
firemountaingems.com – bead looms, beading thread, 6/0 seed beads, beads, large eye beading needles
nativeamericancraftssupplies.com/powwow beads – 6/0 seed beads, large eye beading needles
Michael's

Books

By Ways in Hand Weaving by Mary Atwater
Weaving, Spinning and Dyeing by Rachel Brown
You Can Weave! Projects For Young Weavers by Kathleen Monaghan and Hermon Joyner

Contact us with any questions you might have as you start weaving in your classrooms: Karen Simon / Linda Sloan - celebrationmontessori@gmail.com

"Free the child's potential and you will transform him into the world." Dr. Maria Montessori