



“Weaving is our Life”
A Family of Weavers at Work

Oaxaca, Mexico
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**Tradition and Modernity in Contemporary Mexico:
The Challenge of Keeping Values in a Changing World**

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*This project is dedicated to the
women of Oaxaca who opened our eyes and our hearts to the stories woven into their designs.
Thank you for enriching our lives by welcoming us into your world and sharing your culture.*

***“We are a family of weavers.
Weaving is our work.
Weaving is our community.
Weaving is our life.”***

Pastora
Women’s Weaving Cooperative

Oaxaca, Mexico
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The women pictured on the right are part of an extended family of weavers in a small village in the state of Oaxaca, Mexico. This family is part of a women’s weaving cooperative which welcomes visitors who wish to learn about their work and their lives. They are standing in front



of several of their weavings which feature beautiful colors and intricate designs. Pastora (far left) and her sister-in-law are wearing aprons to protect their skirts. The girls on the right are wearing dark red skirts woven from dyed wool. The skirt fabric is woven in one length and then the two ends of the length are brought together in a hand sewn seam.. To put on the skirt the female steps into the circle of woven fabric and then tucks it around her waist with a fold at one side. The skirt is held on with a woven sash called a *faja* or *banda*. A sash may range in length from 8-17 feet and is approximately 6-8 inches wide. Sashes may be functional or ornamental. The sashes may be finished in fringe, braids or ball shaped tassels. The young girls are wearing fringed sashes. The woman featured in the picture on page 7 is wearing a tasseled sash.

Separating and Sorting the Wool

The Spanish first introduced Merino sheep to the Zapotecs in 1521. The stronger wool, which was valued for its long fibers, replaced cotton and cactus fibers as the primary weaving material (<http://www.rosengren.net/artisansinfocus/weavinghistory.htm> accessed 6/05). The Women's Weaving Cooperative does not raise sheep so they must purchase the raw wool at the market. Grey and crème colored wool is the least expensive as it is the most available wool. Black wool is less available and



therefore more expensive. The wool is sheared from the sheep and is brought to the market matted and dirty. The first task of the weavers is to take the matted wool and separate it into smaller pieces by color. The women pictured above are pulling apart the wool and taking out things that are stuck in the wool. This is a job that can be done by family members of all ages. Usually young children, ages 5-7, start learning the weaving process by participating in the wool separating and cleaning. Older family members, who are no longer able to work the large loom, also assist with cleaning.

Washing the Wool

After the wool is separated it is put into a basket to be cleaned. A few months previous to our visit, Pastora's family cleaned the wool in a nearby river. In November of 2004 they were able to



have running water installed. Now they clean the wool in the work yard.

The wool is placed in the bottom of a woven basket. Clean water is poured into the basket. The women squeeze the water through the wool and out the openings in the basket weave. You can see the dirty water in the green basin. This process is repeated over and over again until the rinse water runs clear. The cleaned wool is laid out in the sun to dry.

Carding the Wool

The women sit on the floor of the recently installed cement patio to card the wool. It is cool there in the shade of the tin roof where a breeze is blowing past the trees in the work yard through the two open sides of the patio. They cover their skirts with aprons or cloth to protect them from the fuzz of the wool and the teeth of the carding brushes. The brushes are two flat paddles made of pine wood. The ping pong paddle sized brushes have many fine wire teeth which are attached by hand to the wooden paddle. Carding requires strength and a practiced stroking pattern. One paddle is held in the left hand with the wide end towards the stomach and



the needles up. The other paddle is held in the right hand, with the handle towards the stomach and needles down. A piece of clean, dry wool is placed on the bottom paddle. The wool is stretched, cleaned and thinned as the upper paddle is pulled across the lower paddle. The carding process requires strong hands and forearms. This process is repeated many times until the wool is pulled into a fine square resting on the teeth of the bottom paddle. After it is inspected and approved by the eldest worker the carded wool is peeled off of the metal wires and placed in a pile of wool ready for spinning.

Spinning the Wool

Separating and carding the wool is a communal process. The family works together, talking about family issues, community events, and local gossip. Spinning is often done in pairs. One person spins the wheel while the other feeds the wool.



The cleaned and carded wool is spun by hand using a handmade spinning wheel called a *rueca*. The woman in the picture has a practiced hand that can feel the weight of the carded wool as it passes through her fingers to be spun into yarn on the spinning wheel. She concentrates her efforts on spinning an even weight of yarn. She knows how quickly or slowly to turn the wheel with her right hand. She knows when to slow down just long enough to join another thin flat piece of carded wool to the yarn end in her left hand. With skill and concentration she fills several spindles with strong yarn. Later she will use the spinning wheel to unspool the yarn in order to create loose bundles of yarn called *madejas*. The yarn that is going to be used in its natural color need not be dyed. The bundles to be dyed will be stored until there is sufficient quantity for the dyeing process.

Containers of Natural Dyes in the Work Yard

Upper left-brazil wood makes a deep red color
Center left- plants, roots and leaves make the color green
Bottom left- flowers and plants make the color yellow
Upper right-nut shells, tree roots and leaves make the color brown
Center right-crushed dried cochineal insects make the color bright red
Bottom right-the indigo plant makes the color blue



Dyeing the Wool

The weavers of the Women's Weaving Cooperative dye wool for their rugs once a year in the summer. Summertime is when the plants used for the dyes are most available. Sometimes the weavers develop color combinations by first dyeing the wool one color and then dyeing it in another color. Other times they seek the color that is natural to the item from nature, such as indigo.

Sometimes commercial dyes are used to make colors that are not found in nature.

The dried cochineal is a beetle like parasite that lives on a species of the nopal cactus plant that is native to



Oaxaca. It looks like a tiny ball of white mold. It became well known for the bright red color used in the uniforms of the British “red coats.” <http://www.teotitlan.com>

The weaver in this picture has a bowl of dried cochineal insects in front of her (white) and one of crushed cochineal (red) near her right arm. She places the crushed cochineal insects in each of the clear glasses on the floor in front of her to demonstrate the range of dye colors. The range in color from dark red to yellow is the result of adding lemon juice and water in varying quantities

to the insect base to vary the acidity or alkalinity of the mixture. The cochineal base is said to yield over eight different shades of dye.

The weavers take pleasure in the creative aspect of the dyeing process. It is time consuming and very labor intensive work. The unpredictable process of making natural dyes from roots, leaves, nutshells, insects and flowers, means that no two batches are exactly the same. The variations in color caused by adding acidity and alkalinity are also part of the creative process. And with each use of the dye lot the yarn becomes a softer shade of the original dye. In addition, synthetic dyes are sometimes available stretching the range of colors available to the weaver. The colorful yarns provide the palette that enhances the pattern in the hands of a skilled weaver.



The colorful yarns in the picture above were for sale in a market in Oaxaca.

Planning the Design of the Rugs

Once the yarn is separated, cleaned, carded, spun and dyed it is time to plan the pattern for the rug. Many weavers use designs with traditional patterns that have been passed down through their family for generations. Others weave interpretations of famous art work. Still others weave customs designs that are specific to the weaving family or village. And finally, some designs are commissioned. Novice weavers begin with straight lines and simple patterns. More



experienced weavers weave from a pattern on a piece of paper that is slipped under the strings of the loom. The most skilled weavers do not need the aid of a pattern to weave what they know by heart.

Pastora (left) explains how she designed this pattern for a rug commissioned by CEDI-Center for Intercultural Encounters and Dialogues. The roots represent the cultural roots and traditions of

the indigenous communities surrounding Oaxaca. The woman is Mother Earth from whom all life springs. The corn plant sprouting from Mother Earth's head is a symbol for fertility and abundance. The picture below shows the finished rug hanging at UNITIERRA in Oaxaca.





Pastora is using a large wooden two-pedal loom to make a rug. It is much like the type of loom introduced by the Spaniards in the early 1500's. The Spaniards taught Zapotec men how to use the two pedal loom. (<http://www.rosengren.net/artisansinfocus/weavinghistory.htm>) Men dominated the weaving work until the late 1950's and 1960's when women began to play a stronger role in weaving.

The rugs she and the other women of the cooperative make range in size from as small as 2' x 3.5' to as large as 3.5' x 5'. The smallest rug can take around two weeks to finish. The larger rugs can take 2-4 months. The quality of a rug is judged by the tightness of the weave (approximately 20 threads per inch.) and straightness of the edges. A good rug should lie completely flat on the floor or hang flat against the wall if used as a hanging.

(<http://www.teotitlan.com/weavings.htm>)



All members of the family participate in some part in the weaving process.

Children generally begin weaving small rugs with simple patterns (like this one picture on the left) around age thirteen.

According to *Artisans in Focus*, novice weavers first begin by learning grecas.

(<http://www.rosengren.net/artisansinfocus/learningtoweave.htm> accessed

6/2005) Grecas are a straightedge design taken from old Mixtec temple ruins that are near Teotitlan de Valle, Oaxaca. Later novices progress to diamonds and other regular shapes.

On this traditional rug, made by the Women's Weaving Cooperative, the straight lines represent the paths of life, the inverted

triangles represent the hills and valleys of life and the white diamond pattern represent the tears of happiness and sadness that fall during our lifetime.

Pictured below are the hands of a weaver who sits hunched over a wooden loom. His fingers fly across the surface. He has memorized the “tree of life” pattern. It has colorful birds sitting on green and brown branches of a tree on a field of natural merino wool.



The rugs that are woven by the weavers of Oaxaca are appreciated for their tremendous beauty and intricate design as well as for their artistic use of color. But most of all they are appreciated for the history, culture and tradition present in each weaving. For the women of the Women’s Weaving Cooperative weaving is a way of life. It is where the entire family contributes from the youngest who separate and clean the wool to the parents and grandparents who weave the intricate designs. It is hard but rewarding work. It is an opportunity to dance at the loom, sing a design from the heart and paint in the colors of the beautiful central valley of Oaxaca in the mountain highlands of southern Mexico. As Pastora said upon greeting us, “Weaving is our life.”

Textiles and Weaving Resources for Teachers

Note: weaving projects are highlighted in **bold**

Artes de Mexico: Textiles de Oaxaca. (2000) Revista Libro Número 35, Distrito Federal, Mexico. www.artesdemexico.com

This book is full of beautiful pictures of textiles from the state of Oaxaca, Mexico. The history of weaving, how items are woven on a backstrap or wooden loom, descriptions of the symbolism of the patterns and explanation of the dyeing process are provided. This is a Spanish language text; however the articles are also printed in English.

Braman, A. (2003). *Secrets of Ancient Cultures: The Maya*. John Wiley and Sons, Hoboken, New Jersey, USA.

This teacher resource and activity book provides information about the Maya under the headings: daily life, society, food, art and architecture. The directions for student activities are clear, concise and user friendly. The author includes a section on weaving and provides directions for **making a woven wall hanging using a cardboard loom**.

Crandell, R. ((2002). *Hands of the Maya: Villagers at Work and Play*. Henry Holt and Company, New York.

This is a pictorial book which describes the daily work of the Maya through pictures of their hands at work. Pictures of planting, cooking, carrying, washing, weaving and much more are included.

Johnston, T. (1996). *My Mexico-México Mío*. Penguin Putnam Books, New York.

This book of poems is written in English and Spanish. The poems speak to life in Mexico. Some of the titles are: Houses, Gourds, Adobe Brick and I Saw a Woman Weaving.

Larsen, L. (1996) *Mayans, Aztecs and Incas*. Teacher Created Materials, Westminster, CA.

The author has developed a thematic unit to teach upper elementary and middle school students about the Maya, Aztecs and Incas. Cross-curriculum content and activities are provided in addition to unit culminating activities and a unit management plan. The author includes directions for a **project on Inca yarn weaving**.

Milord, S. (1999). *Mexico: 40 activities to experience Mexico past and present*. Williams Publishing, Charlotte, Vermont.

This is a rich source for activities (art, paper making, cooking) for upper elementary and middle school students including directions for **weaving a belt on a popsicle stick loom**. The activities include historical, geographical and cultural background information for the teacher. In addition, there is a resource list.

Morris, W. (1987). *Living Maya*. Harry N. Abrams, New York.

The author works with and lives with the Maya in Chiapas, Mexico. The text is a rich history of Mayan weaving and explanation of the symbolism and weaving process. The reader comes away with an understanding of what it means to live as part of the earth, the traditions and the culture of the Maya. The author conducted a tour for the Fulbright 2005 grantees to the weaving towns of Chamula and Zinacantan, Chiapas, Mexico.

Route, J. & Barnell, A. (2003) Mexico. Teacher Created Materials, Westminster, CA.

The authors provide information and activities for primary teachers who wish to teach about the geography, history language, legends, traditions, music, arts, food, and markets of Mexico. Directions for **weaving a Mexican Fiesta place mat** are included. The informational sections provide substantial background information for the teacher. The activities are “kid friendly” and appropriate for young learners but can easily be adapted for older students.

Sanchez, E. (1993). Abuelas’ Weave. Lee & Low Books, New York.

This book tells the story of a grandmother and granddaughter who weave from their hearts. It describes the weaving process from beginning to end through the eyes of a young girl. It is the story of a special relationship between granddaughter and grandmother.

Takahashi, M. (2003). Mexican Textiles: Spirit and Style. Chronicle Books, San Francisco.

This text has outstanding color pictures and beautiful settings for textile use. The author traveled throughout Mexico to find the a large variety of Mexican textiles in cotton, wool and specialty fabrics.

Turck, M. (2004). Mexico & Central America: A fiesta of Cultures, Crafts, and Scivities for ages 8-12. Chicago Review Press, Chicago, Illinois.

This teacher resource and activity book provides information about Latin America under the headings Ancient Roots, Country by Country, Life Above the Clouds, On the Atlantic Coast, Going to School, Art and Poetry, Daily Grind: Corn and Coffee, Celebrating Life, Religious and Patriotic Holidays, and La Frontera: Borderlands. The student activities range from art to math, food, literature and drama. There are excellent maps of the countries and an extensive resource section for each subtopic. Also, included is an activity on **embroidering Mayan designs**.

Internet Resources for Studying About Mexican Textiles

<http://www.anthro.fsu.edu/wovenvoices/weaving/faja.html>

<http://www.celerina.com>

http://www.galenfrysinger.com/dying_and_weaving.htm

<http://www.mayanaculture.com/>

<http://www.mexicantextiles.com/>

<http://www.rosengren.net/artisansinfocus/faq.htm>

<http://www.spanishcolonial.org/textiles.shtml>

<http://www.teotitlan.com/weavings.htm>

<http://www.uv.mx/popularte/flash/scriptphplen.php?&sid=71&len=In>



To view teaching projects developed through the *Fulbright-Hays Summer Seminar in Mexico 2005* program go to the homepage of our host, **COMEXUS**, accessed at <http://www.COMEXUS.org.mx>

To learn more about and apply for the **Fulbright-Hays Summer Seminars Abroad** for U.S. educators go to <http://www.ed.gov/programs/iegpssap/index.html>

To **contact the writer** e-mail lthompson@edvantage.biz. To download a PDF of this resource guide, a handout used at the TESOL 2006 conference, the weaving process pictures shown on the TESOL Poster Session bulletin board and the description sheets for each component of the weaving process go to www.edvantage.biz.