Mexico and Peru: Theme and Tradition in Cloth and Clay

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Topic: Art, Ceramics and Textiles

Grade level: 5th Grade

Timeframe: 9 weeks–full year, depending on available time

Illinois State Fine Arts Learning Goals:

1. Understand the sensory elements, organizational principals and expressive qualities of the arts.
   - Construct a color wheel in a given medium.
   - Recognize rhythm through repetition.
   - Identify universal symbols from everyday life.
   - Locate contrast in a work of art.

2. Understand processes, traditional tools and modern technologies in the arts.
   - Demonstrate fundamental processes in a variety of visual art forms (ceramics, weaving).
   - Describe or demonstrate the process of weaving.

3. Apply skills and knowledge necessary to create and perform in one or more of the arts.
   - Create an art work based on a plan in cooperating research and problem solving.
   - Create a functional object from a variety of materials.

4. Understand how the arts shape and reflect history, society and everyday life.
   - Describe how the same idea is expressed in works of art from different cultures, times and places.
   - Compares the way different cultures, times or places use materials to produce works of art.
   - Investigate how the arts reflect different cultures, times and places.

Illinois State Social Studies Goals

1. Students who meet the standard can understand the historical significance of geography.
   - Compare characteristics of culture as reflected in language, literature, the arts, traditions, and institutions.
   - Explain the significance of knowing about more than one culture.
• Describe how a culture other than the student's own uses its technology to adapt to its environment.
• Identify changes in cultural traits over time.
• Describe how changes in technology bring about changes in daily life.

2. Students who meet the standard can locate, describe and explain places, regions and features on Earth.
• Describe the location of countries relative to the locations of other countries.

Essential Questions:
1. Where are you in the world?
2. How can clay and cloth help you figure out where you are in the world?
3. How do traditional (and ancient) art processes in weaving and ceramics and materials differ?
4. How do these processes reflect different cultures in different parts of the world?

Students will understand:
1. what culture is and how cultural characteristics (food, clothing, art and objects, language, economy) can help you tell where you are in the world.
2. that available resources (isolation vs. trade/travel) help determine what you do, have, make and how you appear to others.
3. the significance of cloth and clay in archaeology and learn about cultures of different times and places.
4. how textiles and ceramics are created and why they are important in a culture.
5. the difference between the function and the aesthetics (expressive qualities) of textiles and ceramics.

Students will know:
1. where the United States, Mexico and Peru are located in the world.
2. that design (imagery, symbolism, texture, contrast, color schemes, rhythm, decoration and embellishment) is an integral part of textile and ceramic work and can be culturally specific.
3. the traditional textile techniques of Mexico and Peru and how they are reflected in contemporary textiles.
4. the difference between natural and synthetic dyes and fibers.
5. that artistry, craftsmanship and technical skill are all important to the production of ceramic and textile artwork in any culture.
6. the vocabulary and processes/techniques of
   • weaving
   • embroidery
   • hand built ceramics (pinch, coil, slab, push-molds)
7. the significance of animal imagery, specifically dog (Xoloitzcuintli) and cat (jaguar), in Mexican and Peruvian ceramics.

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8. the qualities of clay that make it malleable and expressive, yet also permanent.

Students will be able to:
1. locate Mexico and Peru on a world map.
2. discuss textiles and ceramics (elements and principles, materials and techniques) as part of a culture’s identity.
3. use natural and synthetic dyes to color yarn.
4. create a bracelet using Peruvian braiding/knotting.
5. warp an inkle loom and weave a weft-faced bracelet with a chosen pattern.
6. weave a warp-faced weaving on a cardboard loom.
7. cross-stitch a book cover with an abstracted design.
8. use three different stitches to complete an embroidery project.
9. create a pinch pot and use it to make.
   • a whistle or
   • an animal effigy vessel
10. make and use a stamp (sello) to create a repeat pattern on a clay container/tile.
11. use slip to paint a narrative fine-line drawing on a clay vessel.
12. use a push-mold to create or embellish a clay vessel.

Learning Plan: Cloth

Lesson 1, Dying Yarn (2 Days)

Objective
Students will use three natural dyes (beets, blueberry juice, goldenrod) and three chemical dyes (cherry, blueberry and lemonade Kool-Aid) to dye lengths of wool yarn in order to determine which type of dye is more colorfast and intense.

Equipment and materials
- photos or examples of ethnic clothing and cloth (Peruvian and Mexican textiles)
- natural dyes (blueberry juice from canned blueberries; beet juice from canned beets; yellow dye from boiling goldenrod flower heads or made with turmeric and water)
- synthetic dyes (sugar-less Kool-Aid mixed with water)
- container for dyes
- eye droppers
- paper plates
- plastic forks or skewers
- paper towels
- lengths of wool yarn, each 10–12 inches long
• Yarn and Dyes Worksheet [attached] for recording “guesses” and predictions
• buckets or bowls for washing yarn
• PowerPoint: *Fiber and Dyes: Weaving in Mexico and Peru* [available for download from this Web site]

**Introduction**

Class discussion questions:

- How do color and cloth tell you where you are in the world?
  1. the clothing people wear, the material used to make the clothing, the designs on the cloth/clothing
  2. eye color, skin color, the danger of stereotyping vs. a historical discussion of indigenous people and location close to and far removed from the equator and the strong sun.
- Where does color for our clothing come from?
- What does “globalization” mean in terms of where we get our clothes and what we can wear, compared to 100 years ago?
- What does “globalization” mean? In terms of clothing and color?

**Teacher modeling, Day 1**

Teacher demonstration of dying procedure:

- explanation of importance of washing skewers/forks before placing in another color to avoid contaminating the dyes
- read through worksheet
- demonstrate procedure with one dye as an example

**Guided practice/student modeling, teacher coaching and feedback and independent practice**

- Day 1: Students work in pairs to dye yarn and complete worksheet.
- Day 2: Students record actual color of dyed yarn, wash yarn, record change in the intensity of the color.

**Application/student ownership, Day 2**

Class discussion of worksheet:

1. guesses and predictions vs. results
2. ability to make secondary colors with the dyes
3. color differences with washing, colorfast nature of the dyes
4. student explanations of change in colors, intensities

Class discussion of natural vs. synthetic dyes

1. Why did the natural dyes fade and not the Kool-Aid?
2. What do you think the advantages of synthetic dyes might be?
3. Which kind of dyes do you think are used more? What factors would determine which ones a person might use?

**Reflection/assessment, Day 2**
After class discussion of their dying experiment and results, students will view and discuss the PowerPoint on Fiber and Dyes.

1. Teacher presentation of information on slides.
2. Student observations, questions and discussion about the slides, natural dyes, and making yarn. Discussion questions:
   • How is the traditional Peruvian dying process different from what they did in class?
   • How do children and families participate in the fiber and weaving processes in traditional Peruvian rural families?
   • Why would weavers choose to use natural dyes rather than industrial/synthetic dyes?
   • Why wouldn’t they just buy yarn that was already spun and dyed and ready to weave with?

**Lesson 2, Peruvian Knotting/Braiding (4 Days)**

**Objective**
Students will “weave” a friendship bracelet using the traditional knotting technique used in bracelets found in the markets of Mexico and Peru.

**Materials and equipment**
- thick rug yarn for teacher example
- cotton yarn for practice knotting
- craft yarn/thread for bracelet
- safety pins
- PowerPoint: *Fiber and Dyes: Weaving in Mexico and Peru* [available for download on this Web site]
- sample bracelets and belts from Mexico and Peru to show technique
- map of the Americas

**Resources:**
- Friendship bracelets

**Introduction**
Class discussion question:
- How can you take individual pieces/strings of yarn and connect them to make cloth, belts or bracelets or anything “whole”?  
  1. knitting  
  2. weaving  
  3. braiding  
  4. knotting  (EASIEST)

Teacher presentation of information about the weaving and selling of bracelets in the markets to tourists in Mexico and Peru, using PowerPoint:
• children start learning how to make bracelets when they are about 8
• belts are their next projects, then whole cloth on a back strap loom
• expectation in many (rural) areas that children will help in order to help the family financially
• show examples so students can see the complexity of design

Class discussion questions:
• Do you think it will be easy or hard?
• Would you rather spend your days making and selling bracelets, or going to school?
• What skills do you think it will take to be able to make a bracelet that is good enough to keep, or sell?

Teacher modeling
• Demonstrate knotting on large-scale rug yarn.
• Use Web site to show steps:  
  http://www.stedithschool.com/JGS_Files/Friendship_Bracelets.pdf

Guided practice/student modeling, teacher coaching and feedback
• Students work with teacher assistance using medium weight yarn and six strands to make diagonal weave practice piece.

Independent practice/application/student ownership
• Students use craft yarn/embroidery floss to make a diagonal weave bracelet with six strands and the colors of their choice.

Reflection/assessment
• Which was harder to weave with, the thick or thin yarn?
• How much did you have to focus on what you were doing in order to be successful? Could you talk and weave?
• How difficult would it be to do this all day rather than go to school?
• Which would you prefer?
• Do you see that it takes knowledge, skill and patience to be good at this?
• You were tying the same knot over and over. To make the bracelets we saw, you would have to learn new techniques, keep track of different patterns, and remember where you were all the time to keep the designs even and symmetric. Could you do it?
• Were students able to successfully knot a full bracelet?

Lesson 3, Inkle Loom Weaving (4 Days)*

Objective
Students will warp and weave a bracelet on an inkle loom, using contrasting colors to create either vertical stripes, horizontal stripes or a zigzag pattern with a warp-faced weaving technique.

Lesson 4, Back Strap Loom Weaving (4+ Days)*
Objective
Students will warp and weave a sash on a back strap loom using a warp-faced weaving technique.

*Each of these lessons requires the use of specific looms. I have a class set of Inkle looms and back strap looms for students to use in pairs. If these looms are not available to the students, teachers will need to investigate other ways for students to experiment with warp-faced weaving. If teachers choose to use these lessons the following Web sites have good information on each of these looms and the warping and weaving techniques. The Fiber and Dyes PowerPoint has images from my Fulbright trip to Mexico and Peru, and the Notes on Peruvian and Mexican Textiles will provide useful information.

- [http://www.thefreelibrary.com/Unraveling+the+mysteries+of+backstrap+wearing.-a011333486](http://www.thefreelibrary.com/Unraveling+the+mysteries+of+backstrap+wearing.-a011333486)
- [http://www.mayatraditions.com/backstrap.html](http://www.mayatraditions.com/backstrap.html)

Equipment and materials
- inkle and back strap looms
- a variety of colors of thin, strong yarns for warp and weft (cotton crotchet yarn works well)
- PowerPoint: Fiber and Dyes: Weaving in Mexico and Peru [available for download from this Web site]
- Notes on Peruvian and Mexican Textiles [attached]

Introduction
- Students will view slides of back strap weaving from the Fiber and Dyes PowerPoint.
- Teacher introduction of warp-faced weaving and the importance of traditional weaving techniques in Mexico and Peru (notes on textiles; Web sites).

Teacher modeling
Teacher will demonstrate warping and weaving on the Inkle and back strap looms:
- explain weaving terms: warp, weft, heddle, shed, shuttle, tension, “beating down”

Guided practice/student modeling, teacher coaching and feedback
Students will:
- decide on warping pattern for loom
- work in pairs to warp looms
• weave 1–2” of practice to begin weaving

**Independent practice and application/student ownership**
Students will:
• work independently to weave on their loom
• maintain an even width of weaving
• beat down the weft to maintain the warp pattern

**Reflection/assessment**
Did students:
• warp the loom correctly?
• create a warp faced weaving with an even width?
Can the students:
• explain the advantages of an inkle or back strap loom over other looms?
• explain the importance of back strap looms in Mexican and Peruvian weaving?
• explain how indigenous weavers determine the warp pattern?
• explain/define the terms used in weaving?

**Lessons 5, Cardboard Loom Weaving, Embroidery (4–5 Days)**

**Objective**
Students will weave a bag/pouch or doll on a cardboard loom using a weft-faced weaving technique. Students will use at least three embroidery stitches to embellish or add detail to their weaving project.

**Equipment and materials**
• examples of weavings for students to examine
• examples of embroidery stitches and projects
• PowerPoint: *Fiber in Mexico and Peru* [available for download from this Web site]
• Notes on Peruvian and Mexican Textiles [attached]
• cardboard for looms
• warping yarn
• variety of yarns and fabric strips for weft
• tapestry needles for embroidery

**Introduction, Weaving**
Students will view PowerPoint and participate in a teacher-led discussion of the differences between warp- and weft-faced weavings:
• warp-faced: the pattern is determined by the warping colors and pattern
• weft-faced: the weft determines the design of the finished cloth. The design will have a horizontal (*parallel with the weft*) overall design (*because the weft is what will show*)
Teacher modeling
- Teacher will demonstrate the warping of the loom to create a bag/pouch.
- Clear directions for this are found in the Sarah Swett book, *Weaving for Kids*.
- Teacher demonstration of weaving, using a variety of textures.
- Examples of a finished bag and a finished doll should be shown for student understanding of the process and product.

Guided practice/student modeling, teacher coaching and feedback
Students will:
- warp loom
- decide on individual project
- begin weaving with teacher directions and assistance

Independent practice and application/student ownership
Students will weave independently to complete bag/doll.

Reflection/assessment
Did students:
- warp loom correctly?
- create a successful weaving with a closed bottom and an opening for a bag (or head so doll can be stuffed)?

Introduction, Embroidery
Student/teacher discussion of PowerPoint images and examples of embroidery
- why is embroidery used? (decoration, detail, embellishment, add symbols…)
- what different stitches can be identified?
- what skills do you need to be able to do this?

Teacher modeling
Teacher demonstration of at least three different stitches
http://inaminuteago.com/stitchindex.html (good online examples)
- chain stitch
- satin stitch
- running stitch

Guided practice/student modeling, teacher coaching and feedback
Students will practice these stitches on scrap fabric or a worksheet prepared by teacher. *(Drawing the stitches, the correct size and spacing, and copying on cardstock gives students a chance to practice in a non-threatening way. The stitches can easily be torn out or the paper thrown away if the student is having difficulty. Students may find this a much easier way to practice than on fabric scraps.)*
**Independent practice and application/student ownership**

Students will determine how they want to embellish their weaving and then add at least a sample of each of the three stitches. It is easier to add decoration around the top of the bag as a border than to stitch on the front of the bag. Students may find it frustrating to sew with one hand inside the bag and may sew the front and the back together if they are not attentive.

**Reflection/assessment**

Can the students:
- explain the reason for adding embroidery to a woven surface?
- successfully sew at least three different embroidery stitches?
- cite and/or identify examples (from the Mexican and Peruvian textiles they viewed) of embroidery and embellishment on woven fabric?

Did the students embellish their weavings in a way that makes the stitching integral to the design of the project?

### Lesson 6, Cross-Stitch Book Cover (4–5 Days)

**Objective**

Students will study the technique of cross-stitch introduced to Mexico by the Spaniards and create, and stitch, a design abstracted from nature to use as a book cover.

**Equipment and materials**

- PowerPoint: *Fiber in Mexico and Peru* [available for download from this Web site]
- Web site of choice for directions for cross stitch:
  - [http://www.wikihow.com/Cross-Stitch](http://www.wikihow.com/Cross-Stitch) (photos and video direction)
  - [http://yarntree.com/007begin.htm](http://yarntree.com/007begin.htm)
- embroidery floss and tapestry needles
- cross stitch fabric or plastic
- graph paper for student designs, markers or colored pencils
- examples of realistic images and abstract simplifications
- examples of Mexican cross stitched clothing (or contemporary cross stitch examples if that is all that is accessible)
- Notes on Peruvian and Mexican Textiles [attached]

**Introduction**

Student/teacher viewing and discussion of PowerPoint.
- How does the color, pattern, design of clothing tell you where you are in the world?
How did European influence change the traditional dress of Mexican women? (The Huipil was replaced in many areas with the blouse. The embroidery of the Spanish was adopted, as well as the simple cross stitch. The yokes of blouses were decorated with cross stitch designs that were and are today used to identify the community of the wearer. This is the same with Huipils in traditional and contemporary Mexican rural culture.)

- How are designs translated into a geometric cross stitch format?
- What makes one design more interesting and well crafted than another?
- What reason would a community of women have for dressing in clothing of similar colors and designs?
- Can you think of any contemporary examples, from your/our culture where a group of people in a community dress like each other?

**Teacher modeling**
Teacher demonstration of cross stitch. (The first Web site might be shown).
- explanation of necessity of simplifying image to fit into a grid design format
- demonstration of threading needle, making stitches

**Guided practice/student modeling, teacher coaching and feedback**
Students will practice making X stitches on a small piece of cross stitch fabric or on a paper pattern prepared by the teacher, making half of the stitch going in one direction and then finishing the X with the second half of the stitch, working back over the first stitch.

**Independent practice and application/student ownership**
- Student and teacher will decide on most appropriate cross-stitch design for the student. Students may abstract a flower or animal by using graph paper to make it into a simple more geometric design.
- Student will stitch a small book cover with a cross-stitch design.

**Reflection/assessment**
Can students:
- explain how cross stitch became important in Mexico?
- how the Spanish influenced its popularity?
- explain why a community might choose to dress in a similar style?
- create a cross-stitch design with craftsmanship and skill?
Learning Plan: Clay

Lesson 1, Animal Sculpture or Sculptural Container (2 Days)

Objective
After studying Mexican and Peruvian animal sculpture students will use coils and sculptural techniques to construct a 3-dimensional animal or anthropomorphic sculpture (or sculptural container) based on Xolo (Mexican hairless dog/Peruvian Inca Orchid) or jaguar imagery.

Equipment and materials
- PowerPoint: *Ceramics in Mexico and Peru* [available for download from this Website]
- Notes on Cats and Dogs [attached]
- Notes on Mexican and Peruvian Ceramics [attached]
- photographs, images of jaguar, Inca orchid (Xolo)
- oil-base clay for practice, optional
- air-dry or water-base clay to be fired
- clay tools
- slips or under glazes, brushes

Introduction
Class discussion questions:
- How can ceramics tell you where you are in the world?
- Discussion of archaeology and the information ceramics offers archeologists (refer to Notes on Mexican and Peruvian Ceramics).
- Discussion of the qualities of clay:
  a. clay is malleable when moist and plastic
  b. clay becomes permanent when fired
  c. clay differs in color and composition depending on its origin and locale
  d. ceramic objects can be functional, aesthetic or both; form vs. function
  e. pinch, coil and slab are the three basic construction techniques for clay containers and sculpture
  f. ceramic artists must understand the limitations of clay construction (thickness, size, firing temperature…) in order to produce successful clay objects
- Students will view and discuss Slides 1–13 of the PowerPoint:
  1. What imagery is used? How can you tell what the animals are?
  2. How did the artists decide which animal parts, patterns to use?
  3. How is the detail shown? Painted? Added on? Carved in?
  4. Why would the jaguar and the Xolo be used as images on ceramics? (Refer to notes on Cats and Dogs.)
  5. What shapes are the containers? Open or closed? Lids? Feet?
  6. What do you think some of these containers might have been used for? (storage containers, pitchers, cups…)
7. Often ceramic containers, particularly those with animal images, were found in burial tombs. Why would they be put there?

Teacher modeling
Teacher demonstration of pinch pot technique:
- [http://www.pottery.netfirms.com/assignments/assign_2.html](http://www.pottery.netfirms.com/assignments/assign_2.html)

Teacher demonstration of adding coils for legs and a smaller pinch pot for a head:
- need for sturdy legs to give support
- need for hollow head (if it is more than ¾” thick), and pinhole between head and pot for air to escape from head. Every hollow clay form must have a pinhole for steam to escape during firing.

Guided practice/student modeling, teacher coaching and feedback
- Students work with oil-base clay to practice making pinch pots. This clay does not dry out and gives students more opportunity to practice, with less frustration than water-base clay, which can only be handled for a short time before it becomes too dry to handle and mold easily.
- Students will experiment with adding legs, head, deciding which animal they will make and whether it will be a container or sculptural.

Independent practice/application/student ownership
Students will:
- use water-base clay to form their pinch pot(s) for the bowl (body) of their chosen animal.
- decide which features of the animal they will emphasize to communicate the animal image.
- add legs, head, tail, and other detail.
- decide on how pattern and design will be added: additive, carved, painted?

Reflection/assessment
Did students:
- use their knowledge of the characteristics of clay to make walls of appropriate thickness, allow pinholes to escape hollow forms and provide adequate support for container or sculpture?
- use their technical skill with clay construction to join forms together and add detail and/or texture to convey the animal imagery they chose?
- demonstrate patience and craftsmanship?

Student self-assessment:
- Is your sculpture (container) well constructed, crafted and decorated?
- What construction techniques did you use? How are they similar to the Mexican and Peruvian artifacts you viewed?
- Can the viewer tell what animal you used for your imagery?
Lesson 2, Effigy Vessel, Human or Animal (4 Days)

Objective
After a study of the Moche ceramics of Peru students will make a vessel using a pinch pot technique, adding embellishments and decoration with additive and push-mold techniques. This lesson demands the teacher is able to buy or make a mold(s) for students to use. There are flexible molds for Sculpey clay (small faces, other objects) that can be purchased. Plaster molds can be made with various simple methods the teacher can learn about online or through books or using an art teacher as a resource.

Equipment and materials
- molds for embellishment
- clay and clay tools
- PowerPoint: Ceramics in Mexico and Peru [available for download from this Web site]
- Notes on Mexican and Peruvian Ceramics [attached]

Introduction
Students and teacher will view PowerPoint on ceramics (slides 20–27):
- discuss the mold making process and the advantages of molds.
- discuss why the Moche used molds for their portrait vessels.
- discuss and define the term “effigy” and why they are found in burials/tombs (specifically, Moche portrait vessels).

Teacher modeling
Teacher demonstration of push-molds and joining molded items to ceramic container

Guided practice/student modeling, teacher coaching and feedback
Students will:
- decide, with teacher advice and input, on image for container and determine which part will use a molded form/embellishment.

Independent practice and application/student ownership
Students will:
- construct clay effigy container.
- add push-mold embellishments.
Reflection/assessment
Can the student:
• explain what an effigy is?
• explain why the Moche used push-molds for their portrait vessels?
• explain how a mold is made?
• explain the advantages of push-molds?
Did the student:
• create an effigy container that can be identified as a specific animal or a face/person?
• successfully construct and embellish their container demonstrating their knowledge of the characteristics of clay?
• successfully construct and embellish their container with additive clay techniques and/or push-mold components?

Lesson 3, Sellos and Textured Vessels (3–4 Days)

Objective
After studying the designs of ancient Mexico, students will make a sello (stamp) based on these designs and use it to press a repeated, textured design on a clay vessel or tile.

Equipment and Materials
• clay
• clay tools, wooden skewers
• clay stamp example that has already been fired
• PowerPoint: Ceramics in Mexico and Peru [available for download from this Web site]
• Notes on Mexican and Peruvian Ceramics [attached]
• Design Motifs of Ancient Mexico (Dover Publications)
• http://calstaging.bemidjistate.edu/en3930/rhae/suz/howtostamp.html

Introduction
Students will view and discuss slides 17, 18, 19:
• What are the objects in these slides?
• What are they made of? How are they used?
• What would be an advantage of molds and stamps over hand forming and designing each piece?
• What difference would this kind of “mass production” make in the lives of the artists? In the lives of the people who used/had access to ceramics work?

These molds and stamps are made of fired clay. As artisans created their ceramics more quickly and the pieces became less unique, they also became less a symbol of status; anyone could have them. It also let the artists make beginning forms that all looked alike, and then adapt and alter each one so it did become unique, but similar, to the others that came from the same mold.
(Moche portrait containers in Peru are an excellent example of this.) Standard symbols that were recognized and important in the culture could be quickly and easily applied to the surface of pottery in repeat patterns with clay stamps (sellos).

**Teacher modeling**
Teacher demonstration of stamp making:
- draw design
- put design against leatherhard clay and trace with pencil to make impression in clay
- use wooden skewer and clay tools to carve design more deeply into the clay stamp*
- demonstrate with pre-fired stamp that the design reverses when stamped in moist clay

*If students wish to make a cylindrical stamp, the clay must be moist, rather than leatherhard. The process will be the same, but the clay will be rolled into a cylinder after the design is first transferred to the clay. After the join is carefully smoothed so the stamp design is not erased, the deeper incising will be completed. A cylindrical stamp will be easier to use on a container that has a curved wall.

**Guided practice/student modeling, teacher coaching and feedback**
Students will:
- create a 2”x2” stamp design based on an either ancient Mexican motif or a pop culture motif
- refine and complete their design
- use demonstrated technique to transfer design to square of leatherhard clay
- use clay tools and skewer to further incise design

At this point in the lesson, the teacher will need to determine what clay project the students will create to decorate with their stamps. Tiles would be the easiest, slab containers the second simplest alternative and any sort of container with a curved wall (coil pots or containers made with molds) the most difficult. The expertise of the teacher and the grade level and prior ceramics experience of the students should determine the most appropriate projects

**Independent practice/application/student ownership**
Students will construct their clay project in preparation for stamping. After clay container/tile is completed (and kept moist so the stamp will make an imprint), and the stamps have been fired, students will:
- decide the best placement of the stamped design on their clay to create an aesthetically pleasing product.
- use their stamp to create a repeat pattern on the surface of their project.
- maintain the integrity of the shape of the clay project through the stamping process.
• be able to explain the significance of their design motif to the Mexican culture or their pop culture.

**Reflection/assessment**
These questions are for both teacher assessment and student self-assessment of the project.
Did students:
• demonstrate the craftsmanship and technical skill necessary to create a successful clay project?
• apply their stamp to their clay project to complement the clay piece and make it an integral part of the piece?
• design a stamp with traditional Mexican imagery or a contemporary pop culture image?

Can students:
• explain the meaning of the motif they designed and its cultural relevance?
• explain how stamps and molds changed ceramic production in ancient Mexican and Peruvian cultures?
• explain how ceramic artists (in any culture) address form and function?
• explain how design on ceramic work (ancient or contemporary) can tell us where in the world it is from?

**Lesson 4, Narrative Vessels (3–4 Days)**

**Objective**
Students will construct a slab container and decorate it with red slip in the “fine line” drawing techniques found in Peruvian ceramics.*

*This lesson presumes the teacher has the expertise to show students how to construct a simple clay cylinder.

**Equipment and materials**
• PowerPoint: Ceramics in Mexico and Peru (Slides 22, 23) [available for download from this Web site]
• Notes on Mexican and Peruvian Ceramics [attached]
• clay and clay tools for simple clay cylinder
• slip and brushes
• student drawings

**Introduction**
Teacher and students will view and discuss the PowerPoint slides:
• What are narrative drawings? What is their role in art?
• What is the significance of narrative ceramics? What can they tell us?
• Why are some simple and some more complex?

**Teacher modeling**
Teacher demonstration of transferring line drawing onto clay, constructing cylinder and painting line drawing with slip

Guided practice/student modeling, teacher coaching and feedback
Students will:
- create a narrative drawing communicating a scene from their life or their pop culture to transfer to their clay.
- consult with teacher to make sure that the level of complexity of their narrative drawing is appropriate to the slip painting technique.

Independent practice and application/student ownership
Students will:
- roll out their slabs.
- transfer drawing to clay.
- construct cylinder.
- use slip to paint fine line drawing.

Reflection/assessment
Can student:
- explain the value and role of narrative drawing in art?
- explain how fine line drawing is significant to Peruvian ceramics?

Did students:
- create a drawing appropriate to the fine line slip painting technique?
- successfully construct a cylinder with a “readable” narrative drawing?

Lesson 5, Clay Whistles (3 Days)

Objective:
Students will use a pinch pot technique to design and create a working whistle, decorated and embellished with at least two of the techniques used in the Mexican and Peruvian ceramics they studied.

This project should be the culmination of the clay projects based on Peruvian and Mexican ceramics. It incorporates all of the clay techniques, knowledge and skills that students should have gained. It also allows the students to use the imagery of these two cultures to create their own zoomorphic clay whistle. The Web sites listed here give instructions and a history of the clay whistle/ocarina. The teacher demonstration and student work and assessment should follow the same format as the previous lessons. Teacher interest and expertise will determine the use of this lesson. It takes teacher/student collaboration to ensure that the whistles work, but the students are so excited with the results teachers may find the effort required worthwhile.

Introduction
Directions

1. Take 2 equal balls of clay (about 2” to 3” in diameter) and make 2 pinch pots. Stick the pots together to make a hollow form. This is the body of the whistle. It does not have to be perfectly spherical. Make sure the pots are "pinched" together around the seams with no visible holes.

2. Make a small block of clay (about 1” to 2” square) and attach to the top of the form. The top of the block should be aligned with the top of the hollow form. Insert a needle tool or small stick through the clay block and into the hollow form. The top of the needle tool or stick should be aligned with the inside top edge of the hollow form.

3. Cut an angled opening in the hollow form, at the approximate point where the needle tool or stick enters the form. The opening should be slightly smaller than the block is wide and the angle edge should be cut on a 45-degree angle. Blow into the block end to produce a single note whistle sound. The air travels through the block opening, into the hollow form chamber, and is split over the 45-degree angle to produce the whistle sound. Note: The angled opening should be about 1” to 2” in length with the angle and actual cut-out equal in size.

4. To change or add to the pitch of the whistle, add additional holes around the top or sides. Usually no more than 3 to 4 holes should be added, with the holes being no larger than the width of a pencil. Vary the size of the holes to produce different sounds. As the clay dries and shrinks, the sounds change.

5. Decorate, by adding appendages or carving into the clay. At this time, paint can also be applied as well as any other medium. When adding any appendages, make sure the clay is properly wedged or pinched together. Failure to do so will lead to structural faults.
Teacher modeling
Teacher demonstration of:
- joining pinch pots and making holes for blowing and venting the whistles.
- how the whistles work, using example whistles and teacher-made examples.

Guided practice/student modeling, teacher coaching and feedback
Independent practice and application/student ownership
Students should not need guided practice for making pinch pots or embellishing and decorating their whistle body. Their ability to use the clay skills from previous lessons should provide anecdotal assessment opportunities. Teacher modeling may be necessary, again, when students have the whistle constructed and are experimenting with the holes.

Reflection/assessment
Can students:
- construct and join pinch pots to make a hollow form?
- add embellishment and decoration?
- identify the techniques and images used as Mexican- or Peruvian-inspired, and cite examples from the PowerPoints or other resources?
- make a workable whistle?
Yarn and Dyes Worksheet

DAY 1
What is each of the dyes made from? What color will it dye your yarn?
1.  
2.  
3.  
4.  
5.  
6.  

DAY 2
What color did your yarn turn? How did washing change the color?
1.  
2.  
3.  
4.  
5.  
6.  

- Dye each of your pieces of yarn by putting it in the dye and letting it set for two minutes.
- Label your paper plate so you know where your yarn will go.
- Use the fork or knife to take the yarn out of the dye. Let it drip over the cup for a minute or two so that there is not too much dye left on the yarn. You do not want it to sit in a puddle of dye on the plate.
- **DO NOT TOUCH THE YARN OR DYE WITH YOUR FINGERS.**
- Use the eye dropper to dye one of the pieces purple, another orange and a third green.
- Label the SECONDARY COLORS with the second dye you used.
- Put your name on this paper and on your plate.
Notes on Peruvian and Mexican Textiles

Textiles can tell us much about a culture. Textiles deteriorate in a way that ceramics do not so it is harder to gather historical information for preserved textiles, archaeologically, than from ceramics. Much of the information about ancient Peruvian and Mexican textiles is extrapolated from drawings on codices or from the way textiles are depicted in ceramic sculptures. The oldest remnants of Mexican textiles are dated from 1800–1400 B.C. Textile remnants have been well preserved in the northern coastal deserts of Peru due to dry climate. Back strap looms are the traditional looms used in both Peru and Mexico. They are depicted in drawings as well as sculptures and have been used for centuries.

The fiber most often used in Peru is wool; the higher altitude requires warmer clothing and the Andes are an area favorable for raising the alpaca, llama and sheep that all provide wool fiber. Alpaca is soft and can be dyed a variety of colors; llama is used most often for ropes and sacks; sheep were introduced to Peru in the 1700s by the Spanish and have replaced llama and alpaca in many areas.

In Mexico, with a warmer climate, cotton is the fiber most used. The Spanish introduced European looms and dyes, ready made clothes, and factory cloth when they conquered Mexico. Synthetic fibers and dyes replaced natural fibers and dyes in many areas of both countries in the twentieth century.

In pre-Colombian Mexico, and some rural villages yet today, infant girls are ceremonially presented with drop spindles to ensure that they will become worthy weavers. Xochiquetzal is the patroness of craftwork and Ixchel, the goddess of weaving and the moon. She is also referred to as “she of the 13 colored skeins.” Ixchebalyax, Ixchel’s daughter, is the patroness of embroidery.

Textiles were of such value in Mayan Mexico that they were used as tribute. It is thought that weavers were exempt from sacrifice, so valuable was their work. Culturally, textiles can indicate social, economic and marital status and community and personal identity. Special clothing and textiles are used in specific ceremonies and can reveal significant information about the customs of a culture. This is particularly evident in the Chamula and Zinicantan areas of Mexico and the Puno area of Peru.

In both Mexico and Peru girls begin weaving when they are 6–10 years old. (Boys in areas of Peru begin knitting at 8. Knitting was introduced to Peru by the Spanish. Men knit as well as women; 5 needles are used for the traditional Peruvian hats.) At these young ages weaving begins as playing with yarn, observing and using a few warp strings to experiment. Children learn by doing. They are given short lessons and learn how to copy what they observe. They begin with simple patterns and practice them until they become automatic and are mastered. They build on these skills and patterns as they grow older,
creating more complex designs by enlarging, repeating, mirroring, and inverting the simple design motifs. A weaver develops a vocabulary of motifs and techniques that includes a variety of symbols and images. These might include: geometric shapes; animals and plants; geographic features; cultural or religious symbols; and symbols representing agriculture, astronomy, flora, fauna, and human forms. Then, using creativity and systematic, logical combinations of these motifs each weaver finds ways to make unique and personalized designs.

The first weaving projects of children are narrow bands and bracelets, then belts and finally lengths of cloth that can be used for bags or clothing. The width of cloth is determined by the back strap loom and the arm span of the weaver. Back strap looms are the looms of choice because they are very transportable and easy to construct. One end of the looms is attached to any stationary point; the loom is held taught by a strap around the weaver’s back. Traditional Peruvian weavings are warp-faced; the arrangement of the warp threads determines the design of the cloth because the warp threads are visible and the weft threads beaten down. The quality of the final weaving depends on the warp placement and the beating down of the weft thread. The women who warp the loom decide on the color scheme and arrangement of warp threads. The weaver can change the look of the weaving by picking up warp threads to create different patterns and motifs. *Pallay* is the Quechua (a Peruvian indigenous language) word for “picking up.” The experiences and understanding, history, memory, emotion of the weaver determines the “picking up” as well as the warping strategy. This picking up of warp threads and complicated patterning is often found on the edges of widths of cloth.

"The process of weaving reflects on the weaver’s daily life. Each of her weavings contains her history, from the saddest to the happiest moments. Each is the manifestation of the unique experiences of her life, of her family and of her community” (p. 56)

“Cloth produced from synthetic yarns in brilliant colors has gained great favor in most communities, especially in textiles for marriage, festivals and rituals. For young people, synthetic clothing and textiles represent honor, prestige, modernity and youth” (p. 63)

– Nilda Callanaupa Alvarez, *Weaving in the Peruvian Highlands: Dreaming Patterns, Weaving Memories*

The clothing made from back strap woven cloth often has simple lines due to the rather standard widths of cloth that can be woven on these looms. In Mexico the traditional *huipil* (blouse), *rebozo* (carrying cloth and shawl) and shoulder bag evidence this clothing construction style. Much of the textile work in Mexico was embellished during weaving with *brocade* work, or after weaving with: embroidery (satin stitch, chain stitch, running stitch, feather stitch), cross stitch, appliqué, and drawn threadwork. Clay stamps are also used at time to stamp designs on woven cloth. This differs from the traditional Peruvian weaving that showed little embellishment, but rather designs created with the techniques of
warp-faced weaving and picking up. In both countries there is a contrast between traditional weaving and textile work and more innovative, contemporary weaving using synthetic fiber and dyes. Additionally there is a contrast between rural and urban weavings in Mexico and Peru. Each country has seen resurgence in traditional dying and weaving techniques as artisan cooperatives in rural areas are gaining support and a larger marketplace outside their rural areas. The Center for Traditional Textiles of Cusco is a example of such an endeavor in Peru. In San Cristobal de la Casas, Mexico the San Jolobil (House of the Weaver) is a very successful cooperative run by groups of Tzotzil and Tzeltal craftspeople who operate the cooperative store. It has about 3,000 members who contribute products, help run the store, and share in the moderate profits.

Woven fabric is decorated with both embroidery and simpler cross stitch. When the Spanish conquered Mexico they brought the embroidery technique of cross stitch, and the fashion of blouses replaced the traditional huipils of the indigenous people. Traditionally the yokes of these blouses are cross stitched with symbols or imagery significant to the community. All the women in a community wear variations of the same colors and designs. In Zinacantan, Mexico (which is known for its impressive textiles and embroidery) contemporary artisans now use machine embroidery to create intricate designs on their woven cloth. There is a strong tradition here of dressing in similar colors and designs to maintain a sense of community.

Sources:

- Shauna Carey, personal reflections from Fulbright Seminar Abroad in Mexico and Peru, summer 2008.
- Arqueologia Mexicana, Textiles del México de Ayer y Hoy, Edición Especial, volume 19.
- Arte de México, Textiles de Chiapas, Número 19.
Notes on Peruvian and Mexican Ceramics

Although clay is malleable and impermanent before it is fired, after firing its permanency makes it invaluable to archaeologists. Ceramic shards and artifacts can give archaeologists clues about the cultures that created the pottery and even help the scientists determine where the pottery was created. Clay color and composition are quite locale specific. The composition of the clay can give significant information about where the clay was dug and the pottery made. The level of detail and complexity of design can lead to suppositions about leisure time, status, and the stratification of work within a society. The images and symbols depicted on pottery offer cultural clues about the beliefs, ideals, customs and tastes of the people who created the pottery. The techniques and processes used to form the ceramic pieces can offer other insights into the resources and skills of the potters who formed the objects. In a way, pottery and ceramic shards are almost read like books by archaeologists and others as they “read between the lines” to make inferences about a culture by studying the clay objects they made and used.

Ceramic shapes first mimicked the natural shapes of the gourds that were already used for carrying and storing food and liquid. The lips were made thicker for added strength and the walls more even for better heat distribution. The shapes changed based on the function of the vessel and to make it easier to transport the containers. As agrarian societies became more established and fewer workers were needed for food production there was more leisure time available for ceramic production. Artisans and artists could put more time and thought into the form and aesthetics as well as the function of what they made. As a society became more stratified, production potters became more skilled and expert at their craft. Pottery could be more complex, decorative and embellished. Molds were developed to aid in mass production of standard items. Clay stamps with designs and symbols were also made and used to create patterns on the surface of a form with less time and effort. This made the production of pottery easier and faster and the distribution of pottery was more widespread. As the pieces became more available and common, less status was attached to them.

Ceramic and pottery pieces, both functional and sculptural, have spiritual meaning and uses in almost all cultures. Pottery is often found in burial sites and tombs so that the deceased would have what s/he needed in the afterlife. Miniature sculptures of figures in almost any scene imaginable were used as mediators between life and the spiritual world.

The Moche culture of the northern Peruvian coastal desert area existed from 100–700 A.D. The ceramics from this culture fall into three main categories and exemplify the characteristics of pottery production in an agrarian society. Portrait effigy vessels were made from molds and then individualized to look more like
the specific person they represented.  
(\url{http://www.princetonol.com/groups/iad/lessons/middle/moche.htm})

Sculptural vessel forms with human, animal and even food imagery (squash, potatoes) were also made from molds, as well as hand sculpted.

Lastly, mold-formed vessels decorated with fineline narrative drawings in red slip (\url{http://www.tribalarts.com/feature/moche/}) are examples of the highly skilled work of potters of this culture. These drawings were incised with a sharp tool on leatherhard vessels, usually made with white clay. Red slip was painted onto these guidelines with intricate detail. The themes of these story paintings range from animals (symbolic and more realistic) to food to people engaged in a variety of activities. The earliest examples have quite thick lines, simple figures and areas of solid color-fill. The later examples have thinner lines and much more complex scenes and narratives.

Pottery is part of every culture. Clay work demands patience, knowledge and skill. It requires fire, water, earth and air, four elements spiritually significant to many cultures. And, given that pottery ranges from functional to aesthetic to religious/spiritual, it is important from “table to temple to tomb.”

Sources:

- Shauna Carey, personal reflections from Fulbright Seminar Abroad in Mexico and Peru, summer 2008.
- \textit{Arqueologia Mexicana, el Esplendor del Barro, de Ayer y Hoy}, Edición Especial, volume 17.
- \textit{Arqueologia Mexicana, Los Mayas}, Volume V, Number 28.
Cats and Dogs: Jaguars, Xoloitzcuintli and Hairless Inca Orchids

JAGUAR
- authority
- navigates different environments (tree, jungle floor, rivers, caves), therefore symbol of traversing human and spiritual worlds

XOLOITZCUINTLI (sho-loe-eets-queen-tee) or Xolo
- guardian, a one-man dog
- affectionate
- associated with the moon
- heater at night
- curative powers
- found in Frida Kahlo’s and Diego Rivera’s artwork
- history is not really known; from China?
- Spanish almost eradicated

Peruvian Inca Orchid History: The name of the Peruvian Inca Orchid has an interesting origin. When Spanish explorers found Peru, they also found this hairless breed in the domiciles of the natives. The houses were usually decorated with orchids, and therefore the breed was called the Peruvian Inca Orchid dog. The name of Moonflower Dog also has a story to its name. The lighter-toned variations of the breed were kept inside during the day to prevent sunburn, and at night were allowed to roam free under the moonlight, thus leading to their name. It was believed the Peruvian Inca Orchid dogs—officially Perro sin Pelo del Peru—were crossed with the sight hounds brought by the Conquistadors to produce the modern breed. However, since statues, drawings and other artifacts dating before Pizarro’s time document hairless dogs very similar to what is seen today, it is more likely the breed descended from the hairless dog of Mexico, the Xoloitzcuintli. The Peruvians utilized methods of selective breeding constantly in their culture, even marrying brother/sister pairs among themselves to produce consistency. They applied these methods to breeding their dogs as well, and perpetuated the hairless type. The breed still comes in furred varieties occasionally in litters, but they are only used to help with the hairless version's teeth, eye and skin problems. There is a "night time" and "day time" version of the Peruvian Inca Orchid: the night time version is light-skinned. This dog was prized among the Peruvians and breeders would try to get the lightest pigment they could. The other time, the day time dogs, also called Inca Hairless Dogs, are black in color. Historians say the Peruvian Hairless was brought to the Americas 2,000 to 3,000 years ago during the migration from either Asia across the Bering Strait, or from Africa. Many theories abound to the origin of the Peruvian Inca Orchid, but they are believed to have been around since 750 A.D. when they appeared in the settlements of the Moche people of Peru. Today they still serve their original purposes, although now the hairless
type performs in the show ring. They are kept as bed warmers, companions and house pets. [http://puppydogweb.com/peruvianincaorchid.htm](http://puppydogweb.com/peruvianincaorchid.htm)

**History of the Hairless Dog** [http://www.mahalo.com/Peruvian_Hairless_Dog](http://www.mahalo.com/Peruvian_Hairless_Dog)

Known as the Peruvian Inca Orchid, the tranquility of the name describes the radiant calmness of the dog who was highly prized in Inca culture. Seen on pottery and other art, the dog was considered special due to its hairless trait. When Peru was conquered by Spain, the dogs were discovered in homes near orchid blooms and were first given the name Perros Flora, meaning Flower Dog, and soon after renamed, Peruvian Inca Orchid. [http://www.rumbosdelperu.com/fiestas_articulos1_perrosinpelo_ingles.htm](http://www.rumbosdelperu.com/fiestas_articulos1_perrosinpelo_ingles.htm)