Overview of this Collection-Based Lesson Plan

Park Name: Bandelier National Monument

Theme:
This lesson introduces students to the concept of maintaining cultural traditions through the oral tradition. Pottery making is the central focus for demonstrating this practice in modern Pueblo culture, with pots from the museum collection at Bandelier National Monument being used to discuss this process.

- Essential Questions:
  - Why is it important to maintain traditions?
  - Why is oral tradition important in Pueblo life past and present?
  - How are pueblo pots made?

- Museum collections used in this lesson plan
  - Maria Martinez pot – BAND 1667, and possibly others
  - Legoria Tafoya pottery series BAND 692-705
  - Pablita Velarde painting “Woman Making Pottery” BAND 3098, “Pueblo Views” BAND 672

- Relevance
  - In learning about traditional Native American traditions and values, students will discover how they differ from or are the same as their own.
  - Students will learn the traditional process of making Pueblo pottery.

National Educational Standards
Social Studies
1. Culture.
   Early Grades.
   a. describe ways in which language, stories, folktales, music and artistic creations serve as expression of culture and influence behavior of people living in a particular culture.

New Mexico Standards
Art
Content Standard 1. Listen and develop the essential skills and technical demands unique to dance, music, theatre/drama and visual arts.
B.1. Research and discuss the relationship between art and artifact and their historical, geographic, cultural and political contexts.

Student Learning Objectives
- Learn the traditional Pueblo process of making pottery
- Understand how Pueblo knowledge and values are conveyed from one generation to the next by word-of-mouth
- Note and compare similarities and differences between Pueblo cultural traditions and students’ own
- Find out how present-day Pueblo people learn to balance living in two worlds, and why it is important to them to keep a strong connection to their traditions
Background and Historical Context
Pueblo people and their ancestors have lived in what is now the American southwest for thousands of years. For millennia the early people were hunters and gatherers, obtaining their needs by gaining exhaustive knowledge of what resources were to be found where, and at which times of year. Well over a thousand years ago they began to be involved in farming, eventually learning to raise corn, beans, and squash in this arid land. For all those years, until the Spanish came into the area in the 1500s, the people had passed on their knowledge, beliefs, and experience without the use of writing, relying on word of mouth from generation to generation.

In many ways, the oral tradition is such an integral part of the Pueblo culture that it is still the preferred way of transmitting some skills, such as pottery making. Children are expected to learn by watching, with varying amounts of instruction provided by the skilled potter. Other crafts, ceremonial dances and songs, stories, and even such workaday skills as cooking, are usually passed along the same way. Even though books and reading have been a common part of Pueblo life for centuries, the people choose to keep the old way to pass along many of the old customs. In a culture that values community and family among the highest priorities, the process of oral teaching is important not only for what is passed along, but also for the personal contact and relationships that are built and strengthened.

To many people, pottery is the craft most strongly associated with the Pueblo culture. In archeological sites, pottery pieces are much less vulnerable to the processes that, over centuries, destroy other artifacts. Often all we see of the work of early people is sherds of broken pottery or, sometimes, an intact bowl, jar, or olla. Their shapes and decorations speak across the years of the talents of people who inhabited this land so long ago. And, although decorative motifs change over generations, the way the pottery is made is still the same, from the hand-shaping without use of a wheel, the smoothing and polishing, and the painting of designs applied with a yucca-leaf brush, through the outdoor firing.

Maria Martinez and Pablita Velarde, well-known Pueblo artists, are both associated with Bandelier history. Maria, who passed away in 1980, first began making pottery to sell outside her village due to meeting archeologist Dr. Edgar Lee Hewett who was excavating in Frijoles Canyon in 1908. Over the years she came to be, by far, the most famous of the Pueblo potters, and her work is in museums and collections all over the world. Pablita’s first paying job as an artist was at Bandelier, working on a project to make illustrations for the park museum as part of the Works Progress Administration in the late 1930s. She went on to become a very accomplished and praised painter. Both of them were instrumental in opening doors for other Pueblo people to be known in the world outside of their villages, and had important roles in improving the economic conditions in their home pueblos due to visitors’ interest in purchasing pottery and paintings.

Museum Collections Used in this Lesson Plan
Maria Martinez pot – BAND 1667, and possibly others
Legoria Tafoya pottery series BAND 692-705
Pablita Velarde painting “Woman Making Pottery” BAND 3098
“Pueblo Views” BAND 672

Materials Used in this Lesson Plan
Activity 1
- Maria Martinez video/DVD (source listed below)
- Copies of photos of museum items: Legoria Tafoya (note: Legoria is Pablita Velarde’s sister) series, Maria pot/pots, and other images of pottery that look useful; print and possibly laminate
- Enough for each student: clay, smooth stone for polishing, piece of dried gourd, bowl of water, slender sticks or brushes for decorating pot, burlap to keep the clay moist, colored slip or acrylic paints
Activity 2
- Book: Children of Clay, A Family of Pueblo Potters, by Rina Swentzell, from library or available for loan from Bandelier National Monument (505-672-3861 x 513)

General:
- Download and print chart “How to read an object”.
- Find a photo of Maria on the web; one possible source is www.mariapottery.com. Laminate.
- Get a copy of the Maria Martinez video/DVD from your local library or on loan from Bandelier (505-672-3861 x 513)
- Authentic pieces of present-day Pueblo pottery are available for loan from Bandelier; (505) 672-3861 x 513
Vocabulary

Archaeological excavation - a location where scientists use careful, painstaking methods to learn about past people by digging into places they used
Archeologist - a scientist who studies people, usually from the past, by looking at things and places that they used
Artifact - any object that has been made or used by humans
Clay pit - place where soil suitable for making pottery can be found and dug up
Coiling - method of making pottery in which the prepared clay is pulled and rolled out into long strips, which are then placed around and around the growing vessel to build its walls. Each strip is pinched onto the one below it, and the seam is usually smoothed out. No wheel is used.
Culture - a group of people who share traditions, beliefs, and customs. Sometimes the word is used to mean the traditions, beliefs, and customs themselves, and things or activities related to them.
Dig - an archeological excavation
Firing - the process in which pottery pieces are made hard and strong by exposing them to high heat.
Glaze - a mineral paint, used to decorate or coat pieces of pottery, which melts and becomes vitreous when the pot is fired
Gourds - relatives of squash which develop a hard or leathery outside; when they are dried out, the seeds can be removed from the inside and the hard rind used for such things as bowls, dippers, and clay scrapers
Olla - a large pottery vessel with a wide body and narrower neck, often used for carrying or storing water; sometimes they could hold as much as two gallons
Oral tradition - information and knowledge being passed from person to person by word-of-mouth
Polishing stone - a very smooth, rounded stone used for polishing a piece of pottery
Pot sherd - a piece of a broken pot
Pueblo - Spanish word for village, used to mean a community of people with particular customs, including farming, weaving, and making pottery, and their settlement. There are presently 19 pueblos in New Mexico, plus the Hopis in Arizona and Isleta del Sur outside of El Paso, Texas.
Puki - a Tewa term meaning a dish, often made from the bottom of a broken pot, on which a potter puts the clay as she builds a pot. The puki supports the growing pot and allows it to be turned without sticking to the table. Some potters make pukis specially for different sizes and shapes of pots.
Slip - clay thinned with water to the consistency of paint, often used for painting decorations onto unfired pottery

Teacher Tips

**These materials may be useful for background information:

Books: Bandelier National Monument, by Patricia Barrey
101 Questions about Ancient Indians of the Southwest

Videos/DVD:
  Anasazi*: (Hisatsinom) – The Ancient Ones (30 min)
  Pablita Velarde (30 min)
  Maria the Potter of San Ildefonso Pueblo (30 min)

Available on loan from Bandelier National Monument; call 505-672-3861 x 513, or to purchase, 505-672-3861 x 515 or www.wnpa.org

Websites and other sources:

- Bandelier National Monument: www.nps.gov/band There are also general scenery photos of Bandelier on the web at photo.itc.nps.gov/storage/images/index.html.
- Museum Collections website – http://www.cr.nps.gov/museum
- Library of Congress: http://memory.loc.gov/ammem
- Maria Martinez: www.mariapottery.com

Lesson Implementation Procedures

Activity 1: Pueblo Pottery then and now
1A. Initiate a discussion on pottery making by asking if any of the students have worked with clay in a ceramics class or elsewhere. Show the class some of the prints of old and new pottery from the Bandelier collection, and ask them how old they think the pieces are, and if they have ideas about how they were made. Talk about differences and similarities they notice between old and new pieces.
1B. Show the Maria video; introduce it by showing or putting on the board the picture of her and giving a short biography of Maria and her family and their connection with present-day pottery-making. Explain that the methods shown in the film are ones that have been used in this area for over a thousand years, (except
for using cow and horse manure for fuel and firing for the black finish, since cows and horses weren’t in the area until the Spanish came). In the film she mentions that she learned from her Aunt Nicolasa; she doesn’t mention that she taught many others, passing the skill along in the traditional manner. Tell the class that, although Maria has passed away, they will also be learning from her, by watching her techniques in the film, and that they will be using this knowledge to make their own pottery. If making pottery is not an option, see Activities 3 and 4 below.

1C. Discuss the traditional process and how it might need to be adapted in order to make pots in the classroom. For example, will you be able to go out and dig clay, or will you need to use commercial clay? How will you need to do the firing? At the end of the video, Popovi Da mentions that they sometimes have pots that crack in the firing; should your class expect all their pots to come out perfect on their first try?

Activity 2: Pottery making:
2A. If possible, invite a Pueblo potter to visit the class to talk or demonstrate.
2B. Decide on what kind of clay to provide. Is there a source of dig-it-yourself clay and temper in the vicinity? If so, would it be possible to take the class there to gather the clay themselves? Otherwise, consider buying commercially-prepared clay, or use alternatives such as modeling clay (which never really hardens), Sculpey, or play-doh. Will you be able to do a real firing, or use a kiln, or would it be better to use a material that you will just air-dry, or fire in an oven? Whichever material you choose, do a trial run before trying it with the class.

Two recipes for self-hardening (play-doh-type) clay:
- 1 cup flour, 1 cup water, ½ cup salt, 2tsp cream of tartar, 1tbsp salad oil. Add water gradually to dry ingredients, mix well. Cook over low heat 3 minutes; store in airtight container in the fridge until ready to use
- 4 cups flour, 1 ½ cups salt, 1 ½ cups water. Add water gradually to dry ingredients, mix well. Store in sealed plastic bag in the fridge until ready to use; allow to return to air temperature before using. When object is complete, allow it to dry at air temperature at least two days (not in direct sunlight)

Hints: Newspaper or butcher paper may be useful to protect the tables. For some kinds of clay, you will need to have a small non-tippy bowl of water for each 2 or 3 students to share. This makes it possible for them to moisten their fingers as they work with the clay, to keep the clay from drying too fast, and to help the coils stick together as the pot is built. Consider smocks or aprons. Saucers may be useful in place of pukis to keep the growing pots from sticking to the table surface, and for keeping the pot from being damaged if it has to be moved while still wet. Popsicle sticks may work in place of gourd pieces for scraping the pots smooth. Don’t dry pots in direct sunlight, as they will dry unevenly and probably crack. Instead, dry slowly in a cool, shady place; if necessary, wrap in burlap to slow the drying. Plan to have the activity on two different days, several days apart, so the pots can dry thoroughly before they are painted. If you plan to fire the pots and decorate them with acrylic paints, be sure to paint the pots after they are fired. If you plan to fire the pots, be sure the students know that each coil must be very carefully attached to the previous ones, with no air bubbles, or the pot is likely to explode in the firing. In fact, be sure students know that even very skilled Pueblo potters sometimes have pots crack or explode in firing, but they work carefully to try to prevent it.

If you want the pots to be waterproof, coat the inside with a commercial product such as Verathane after they have cooled from firing. This won’t work with pots that have spaces left between the coils.

2C. Consider taking snapshots of the students working, to show each step in the process. Have the students divide into small groups to have each group write an explanation of what is happening in each photo. When the pots are finished, put them on display in the classroom or a display space somewhere in the school, along with the photos and captions. Alternatively, show them the Pablita Velarde painting, Woman Making Pottery, BAND 3098, and have them draw pictures of themselves to illustrate the various steps.

Activity 3: Creating Original Pottery designs.
As a substitute to making real pottery, or in addition to Activity 2:
Gather pictures of traditional pueblo designs, and discuss their significance with students. These can be found on pot images in the Bandelier museum on-line collections and the online collections from Chaco Canyon (www.cr.nps.gov/museum). Provide a handout with an outline of a pot or have the students decide on their own pottery shapes, and encourage them to experiment with creating their own decoration designs. Authentic present-day Pueblo pottery pieces are available for loan from Bandelier (505-672-3861 x 513)
Activity 4. Use the book, “Children of Clay”. In it the author, from Santa Clara Pueblo, tells how her family passes along the skills and traditions of making pottery. Some of the customs are very old, while new ones have been added over the years.

4B. Ask the students, individually or in a whole-class setting, to decide which parts of the pottery traditions are from long-ago and which ones are from nowadays, and ask them to tell how they know.

4C. Have the students, individually or as a class, write a story or do a mural or series of drawings showing the steps in a skill that they know. Ask them to tell why they hope that this skill will be passed along to other generations, and what they think the best way would be to teach it.

☯ Evaluation/Assessment for Measurable Results

- Ask the students if they think it would work better to learn pottery-making by watching and talking with a teacher, or by learning it from a book. Ask them to explain, verbally or in writing, which way they would prefer and why.
- Put the Legoria Tafoya pottery series photos on the board out of order, and have the class, either individually or as a group, put them in the right sequence, identifying each step.
- Have the students, as a class, in small groups, or as individuals, re-tell orally, in writing, or as a play, the story in “Children of Clay” but set in Ancestral Pueblo times.

☯ Extension and Enrichment Activities

Activity 1
Nowadays pottery is often made to be purchased by people who will use it only as a decoration, but for centuries it was made to be used for cooking, serving, and storage.

Have the students compare some of the Ancestral Pueblo pots with the modern ones, considering whether their makers created them for the same or different purposes and how you can tell. Would you want to put a fancy decorated bowl over a cooking fire? What shape would you want for:
carrying water
storing corn meal
storing seed corn
cooking stew
dipping water out of a large olla

Talk about what foods the Ancestral Pueblo people cooked, and what types of pottery they needed to do it. Or, think of a meal you might eat today, and decide what kinds of pottery you would need if metal pots and pans were not available. Consider actually making a traditional present-day Pueblo meal (possible menu: tortillas, green chile stew, pinto beans, fry bread) and discussing what dishes, cooking pots, and utensils the Ancestral Pueblo people would have used when they cooked their meals, along with which of these foods would have been available to them prior to the arrival of the Spanish, and what they might have eaten instead. Look at the lesson plan called “Community Roles of Pueblo People Past and Present” to find information on what items and materials were introduced into Pueblo culture by European contact. See “Resources” section below for cookbooks.

Activity 2:
- Invite guest speakers and/or demonstrators to visit your classroom, and/or do a classroom pen-pal exchange with Pueblo students. Call the pueblo’s Governor’s Office to initiate contact; information for many New Mexico pueblos is available from the Museum of Indian Arts and Culture’s website at www.miaclab.org, under “Native Communities” or at www.state.nm.us/oia/triballist.html.

Activity 3:
- Invite a park ranger or archeologist to give a presentation about artifact preservation so that future generations can appreciate the history of the area. This would include leaving artifacts where they are found, not moving or collecting them, and what can be learned from them.

☯ Resources
- Charts: “How to Read an Object” found at www.cr.nps.gov/museum
- Bandelier National Monument [www.nps.gov/band](http://www.nps.gov/band) or call park information 505-672-3861, ext.517
- Books available from Western National Parks Association [www.wnpa.org](http://www.wnpa.org), 12880 N. Vistoso Village Dr., Tucson, AZ 85737. 1-888-569-7762.
- **BANDELIER NATIONAL MONUMENT** (ISBN 0-911408-88-6), by Patricia Barrey***
- **ANCIENT INDIANS OF THE SOUTHWEST** (ISBN 1877856-87-8) by David Grant Noble***
- Other books of interest:
  - **GREEN CHILE BIBLE**, compiled by the Albuquerque Tribune (ISBN 0-94066635-9)
  - **PABLITA VELARDE, Painting Her People**, by Marcella J. Ruch (ISBN 0-937206-65-2)***
  - **PUEBLO CRAFTS**, by Ruth Underhill
  - **PUEBLO GIRLS, Growing Up in Two Worlds**, by Marcia Keegan (ISBN 1-57416-020-6)***
  - **SOUTHWEST INDIAN COOKBOOK**, By Marcia Keegan (ISBN 0-940666-03-0)
- Video/DVD:
  - Pablita Velarde (27 min, emphasis on her art and her time at Bandelier) ***
  - Pablita Velarde: Golden Dawn (24 min, from De Colores on KNME; biographical)***
  - Maria the Potter of San Ildefonso Pueblo ***
  - ***Materials available on free loan from Bandelier National Monument, 505-672-3861 x 513

- **Site Visit - to a location displaying pottery by Ancestral Pueblo and/or present-day potters:**
  - **Pre-visit:**
    - If planning to visit Bandelier National Monument, contact the Visitor Center (505-672-3861 x 517) to find out if any of the items you are interested in showing to the students are currently on display. Contact 505-672-3861 x 534 to make group visit reservations.
    - Also, Bandelier’s online collection at [www.cr.nps.gov/museum](http://www.cr.nps.gov/museum) contains many more examples of Pueblo and Ancestral Pueblo pottery besides those highlighted in this lesson.
  - **Other possible locations:**
    - **Museum of Indian Arts and Culture**, Santa Fe, New Mexico
      710 Camino Lejo, Santa Fe, NM 87501  505-827-6463  [www.miaclab.org](http://www.miaclab.org)
    - **Millicent Rogers Museum**, Taos, New Mexico
      1504 Millicent Rogers Rd, Taos, NM 87511  505-758-2462  [www.millicentrogers.com](http://www.millicentrogers.com)
    - **San Ildefonso Pueblo Museum**, San Ildefonso Pueblo, New Mexico
      Rt 5 Box 315A, Santa Fe, NM 87501  505-455-2273
    - **Indian Pueblo Cultural Center**, Albuquerque, New Mexico
      2401 12th St, Albuquerque, NM 87104 1-800-766-4405  [www.indianpueblo.org](http://www.indianpueblo.org)
    - **Southwest Museum**, Los Angeles, California
      234 Museum Dr, Los Angeles, CA 90065  323-221-2164  [www.southwestmuseum.org](http://www.southwestmuseum.org)
    - **Museum of Northern Arizona**, Flagstaff, Arizona
      3101 N Ft. Valley Rd, Flagstaff, AZ 86001  928-774-5213  [www.musnaz.org](http://www.musnaz.org)
    - **Florence Hawley Ellis Anthropology Museum**, Ghost Ranch Conference Center, Abiquiu, New Mexico
      HC 77 Box 11, Abiquiu, NM 87510  505-685-4333  [www.ghostranch.org](http://www.ghostranch.org)
  - Contact the proper office at the institution to make reservations, and find out practical matters you will need to handle ahead. Arrange for plenty of active, assertive, interested chaperones.
Before the visit, have students visit the institution’s website for an overview, or obtain brochures and other written/visual materials about the site. Have the class come up with a list of questions to guide the visit. Work with site staff to arrange the visit with challenging activities.

**Site visit:** At the site, have students select at least two objects to analyze. Provide “How to Read an Object” sheets, which include an object sketch sheet (white space to make a detailed sketch of the objects). For younger students, develop a “scavenger hunt” object list to encourage close observation skills.

**Post-visit:** See extension activity list for ideas for post-visit student presentation ideas.

**Virtual visit:** If a park or institution has a website that provides a virtual visit, assign an activity that guides students in their exploration of the website, and leads them to related websites for more depth.