



National Park Service
with **Teaching MUSEUM** Collections
Management Program
<http://www.cr.nps.gov/museum>

- **Title :** Exploring Cultural Continuity Through Pottery
- **Developers:** Karen Cox and Jeff Davis, Turquoise Trail Charter School, Santa Fe, New Mexico
- **Grade Level:** Fourth grade (may be adapted to other grades)
- **Lesson Length:**

□ **Overview of this Collection-Based Lesson Plan**

Park Name: Bandelier National Monument

Theme: Pottery and artifacts of the Ancestral Pueblo people, and of the present-day Pueblo people, demonstrate the continuity of the culture over time.

- **Essential question:** What can we learn about the continuity of Pueblo culture from pottery and other traditional items from past and present?
- **Relevance:** This lesson will show students the continuity of a culture across time by looking at pieces of Native American pottery; the methods used to create them, both for form and function, and how they have evolved over time.
- **Museum Collections Used in this Lesson Plan.** Archeological and contemporary ceramics in the Bandelier National Monument museum collections. [see detailed descriptions below]

□ **National Educational Standards**

History, Topic 1

Standard 1A: The student understands family now and in the recent past; family life in various places long ago.

History, Topic 2

Standard 3A: The student understands the history of indigenous peoples who first lived in his or her state or region.

English Language Arts

Standard 7: Students conduct research on issues and interest by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources to communicate their discoveries in ways that suit their purpose and audience.

□ **New Mexico Educational Standards**

Language Arts:

Standard 3A: Use language, literature, and media to gain and demonstrate awareness of cultures around the world.

Social Studies:

Standard 1D: Understand time passage and chronology.

Art:

Standard 2: Use dance, music, theatre/drama, and visual arts to express ideas.

□ **Student Learning Objectives**

After these lessons, students will be able to:

- Critically analyze images of pottery and compare and contrast them using a Venn diagram.
- Participate in discussion demonstrating their understanding of continuity of the Pueblo culture, past and present.
- Tell the steps involved in making a piece of traditional Pueblo pottery.

□ **Background and Historical Context**

For thousands of years, groups of hunter-gatherers moved through the area that is now Bandelier National Monument, seeking meat and edible plants, and other materials they needed to survive. Well over a thousand years ago, the idea of cultivating or growing corn was moving north into the American Southwest. Slowly, groups came to depend more on growing crops. This shift in how they subsisted or lived, led to settling into long-term villages and supplementing their diets with foods that were obtained by hunting and gathering.

By the 1100s when groups began building the cliff homes and other dwellings in Bandelier, they were already knowledgeable about farming in arid areas. They also knew weaving, pottery-making, using native plants, and other skills necessary for life in the area. After living in Bandelier for many generations, around the middle of the 1500s, the people moved away. The pueblos of Cochiti and San Ildefonso consider Bandelier to be an ancestral home, and other present-day villages including Santo Domingo, San Felipe, and Santa Clara acknowledge that their ancestors lived in the area.

Pottery has long been a hallmark of the Pueblo culture. Although different villages have distinctive styles of both form and decoration, the basic process for making the pieces is the same. The potter digs clay, usually from a place known to her family for generations. She soaks the clay, and removes impurities such as stones and leaves. In most pueblos the clay needs temper in order to fire evenly. Some pueblos use particular kinds of local sand, while others grind basalt (a dense, hard volcanic rock) or broken pieces of pottery into fine particles. Usually the clay is left to “rest” overnight. Then a small piece is shaped into a ball and flattened into a disc, to be the bottom of the vessel. Long strips of clay are coiled around and around to build the pot’s body, with the potter pinching the coils together and then scraping the seams smooth. When the pot has reached the desired size, the potter pulls, pushes, and scrapes the walls to the needed shape, and uses rounded pieces of gourd to smooth the pot inside and out. If it is to be utility ware, the pinch marks are left on the outside, and only the inside is scraped smooth. The pot is dried slowly to prevent cracking, and then decorated and fired.

For buyers of contemporary pottery, or archeologists studying ancient pieces, the differences in materials used, and design motifs added, tell of the pot’s date and place of origin. Luckily for archeologists, styles of pottery changed more quickly than those of things such as homes or clothing, as pots often broke and had to be replaced. In addition, pottery resists rot, bugs, and other forces that destroy most items in ancient sites.

□ **Museum Collections Used in This Lesson Plan**

[Bowl, Bandelier Black on Gray, Ancestral Pueblo AD 1450-1550, Pueblo III-V, Ceramic, D. 38.5, H. 19.5, T 0.7 cm. Bandelier National Monument, #BAND 1571](#)

[Bowl, Cochiti Pueblo, circa 1960 by Lorencita Herrera, ceramic, H. 16.5, D. 28.0, T 0.7 cm. Bandelier National Monument, #BAND 1492](#)

[Jar Tsankawi BAND 725](#)

[Bowl Santo Domingo c. 1920 BAND 21548](#)

[Bowl Santa Fe red glaze BAND 1581](#)

[Bowl Cochiti . 1940 BAND 1566](#)

□ **Materials Used in this Lesson Plan**

- Clay (earthen clay, modeling clay, Sculpey, play-doh)(see lesson “Passing Traditions Through Time” for recipes for play-doh-type clay)
- Sample artifacts (e.g., pottery, folk art) – from colleagues, family members, museum shops. Pueblo pottery is also available for loan from Bandelier National Monument, 505-672-3861 x 513
- Venn diagram sheet
- Scavenger Hunt page
- Maria Martinez video/DVD (available for loan from Bandelier, (505) 672-3861 x 513)
- Images from the online collections of Bandelier and other related park sites at www.cr.nps.gov/museum
- *Children of Clay, A Family of Pueblo Potters*, by Rina Swentzell (ISBN 0-8225-9627-X) (also available for loan from Bandelier)

□ Vocabulary

On a large chart in the classroom, create a word and concept list with students as the lesson unfolds. Write definitions with student input as words come into use. For reference:

Agriculture the practice of growing crops

Anasazi - a term found in many books to refer to the ancestors of the Pueblo people. It is a Navajo term which literally means “the ancient people who aren’t us” but is often translated as “enemy ancestors”. Present-day Pueblo people find it offensive, and “Ancestral Pueblo” is preferable.

Ancestor - people related to you who were born before you were; this could include your parents as well as people hundreds or thousands of years ago

Basalt - a hard, dense, durable volcanic rock often used for tools such as metates, hammers, and axes.

Binder - also called temper; material mixed with clay to help the heat of firing be distributed more evenly. Temper may consist of sand or ground-up stone or potsherds

Ceremonial - items or activities related to religious customs

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.

Generation: the continuity of people or families, as in, grandparents, parents, and children make three generations. Also used to mean the time from one set to the next, how many years from the time someone is born until they have a child.

Folk art - a style of art often characterized by energy, enthusiasm, and bright colors, associated with people making objects more for their own use than for the commercial market

Irrigation - to bring water to crops by means of ditches leading from a stream or creek to the garden

Kiln - a structure for firing pottery

Micaceous - clay containing particles of mica, which sparkle as the pot moves. Most commonly used at Nambe, Picuris, Taos, and San Juan pueblos, and reputed to be the best material for pots for cooking beans

Migration - moving from one place to another to find a better home or get away from an unsuitable one

Pueblo - Spanish word for village, also 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

Slip - clay thinned with water, often used for decorating finished pots

Spirit line - a design motif, usually on Pueblo pottery, symbolizing the custom of leaving an opening in the design so that the artist’s creative spirit will not be stuck in that one piece.

Temper - material such as sand or ground-up pottery sherds added to clay to help spread the heat evenly during firing.

Trade goods - items carried by traders to sell or barter somewhere else

Utilitarian - pottery made for use in cooking. It tends to have a corrugated exterior rather than painted designs.

Vessel - an item of pottery, such as a bowl, jar, etc

Tips for the Teacher:

- The URL address of Bandelier is www.nps.gov/band
- Bandelier’s museum web exhibit is located on the National Park Service Museum Management Program website at www.cr.nps.gov/museum

□ Lesson Implementation Procedures

Virtual Pre-Visit

Pre-Visit

Choose images of pots from the Bandelier collection website; print (and possibly laminate) for students’ use

If a computer projector is available, copy images onto disc to display them to the class.

Activity 1: Introduction and Warm Up

Engage students and introduce them to the idea of learning through museum collections. Tell students they will be using objects from a National Park Service site as a source of learning and information. Explain that they will learn to look very closely at a set of objects to deduce historical, cultural and social information and to draw inferences about people, events, and life in the time and place the objects were made.

Display images of pots, BAND 1571 and BAND 1492, from Bandelier collection website. Have students work in small groups observing, comparing and contrasting the pots. Ask them to look at the pots' size, shape, color, and design, figure out possible uses for it, and use the image captions to find out where and when it was made. As a class, create a large-scale Venn diagram with the information on the two pots. A Venn diagram is a chart with two large circles drawn overlapping. Each circle belongs to one of a pair of objects that are being compared; characteristics that are alike go in the overlap area, while characteristics that differ go in the outer areas.

Activity 2: Discussion

Display the Venn diagram and museum collection pottery images. Conduct Socratic questioning/discussion leading students to understand that the pots demonstrate continuity between past and present in Pueblo culture.

Break into groups and have students look at images and create a list of similarities and differences between past and present cultures using these ceramics below.

Ancestral

Jar Tsankawi BAND 725
Bowl Santa Fe red glaze BAND 1581

Contemporary

Bowl Santo Domingo c. 1920 BAND 21548
Bowl Cochiti . 1940 BAND 1566

You may find other items in the Bandelier on-line collection that will be useful for your class discussion. discussion or have the students choose for themselves a piece each from the Ancestral and Contemporary categories

Discussion leaders:

- Do you see similar designs? Similar shapes of pots?
- How do these artifacts suggest change, growth, adaptation?
- How about lack of change?
- How were these artifacts used during their time?
- How are contemporary items used today?
- Why are the changes/lack of changes important?
- How do you think Pueblo craftspeople will be making pots in 250 years?
- What relatives of yours will be here then? What methods will they be able to use to learn about people in the 21st century?
- Why are we interested in how people lived in other times and places?

Activity 3: Maria Martinez Video

Prepare students for the Maria Martinez video. Give them the scavenger hunt list to help them focus, especially if you plan to have them make their own pots. Show the video. Afterward, have students get into small groups to go over their answers to make sure everyone has the information. Conduct an interactive writing activity to review steps in creating a pot. Suggested resource book, "Children of Clay" by Rena Swentzel.

Scavenger Hunt for video about Maria Martinez (use all or part)

1. What pueblo did Maria and Popovi live in? (San Ildefonso)
2. What did Aunt Nicolasa teach Maria? (How to make pottery)
3. What does Maria use to polish the pottery to make it so shiny? (Slip and a smooth stone)
4. What does Popovi Da use as a paintbrush? (A yucca leaf)
5. Why does he use a different color of slip for the design than for the pot? (So he can see the designs as he makes them)
6. The movie was made in 1970 - how long ago is that? Maria passed away in 1980 when she was about 96 - how long ago is that?
7. What are the round, flat, brown things they burn for the firing? (Dry cow chips)
8. What material do they use to cover the fire to make the pots turn black? (Dried, powdered horse manure)
9. How much did they take from the earth (Only as much as they needed)
10. What kind of day do they need for firing? (Dry with no wind)
11. What is slip (A watered-down form of clay)
12. How does Popovi decide on a design to paint on a pot? (The pot tells him)
13. Why is it important to pinch the clay? (To get the air out.)
14. Why does the pot need to be turned as it is formed? (To keep it symmetrical.)
15. Who always starts the fire ? (By tradition, her sister Clara)

Activity 4: Making Pottery

If you wish to have the students make their own pottery, refer to the procedures detailed in the Bandelier Teaching with Museum Collections lesson plan, "Passing Traditions Through Time". When pots are finished, have students present their pots to the class, explaining why they chose the particular shape and decoration, and what the decorations mean. You may want to have the students write this out on note cards. If possible, exhibit the pots in a public space in the school, with information on how they were made and how they relate to the Pueblo people. You may want to introduce the idea that these are "future artifacts" - what would archeologists in the future learn from them, and from other items in our homes/classrooms?

Activity 5: Pottery Alternatives

If you do not wish to make actual pottery, have the students draw pots and make up their own designs, or search through magazines or websites for pots to cut out, print out, or use as models, or obtain samples of actual pottery to use as models. Pots are available for loan from Bandelier; 505-672-3861 x 513. Other websites to visit include Chaco Canyon and other Pueblo-related sites at www.cr.nps.gov/museum.

□ **Evaluation/Assessment for Measurable Results**

- Among the Bandelier images on the web, there is a series of photos showing the steps in making a traditional Pueblo pot; the work was done by Legoria Tafoya, Pablita Velarde's sister. Print out these images and put them 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.
- As a class, small group, or individual project, write a story or play similar to "Children of Clay", but set in Ancestral Pueblo times.

□ **Extension and Enrichment Activities**

- Use Pablita Velarde prints (on the Bandelier collection website) to investigate other traditional pueblo activities, and relate them to old or new items among the website photos.
- Invite a Pueblo person who is skilled in pottery, or another traditional craft, to visit your class.
- Look at the Pablita Velarde painting, BAND 672, showing a cut-away of a pueblo around 1900. As a whole class or in small groups, have the students see how many pots they can find and try to figure out what each is being used for. If this picture had been made of a home in Ancestral Pueblo times or a home now, what would be different?
- Have the students consider this quote by potter Rose Naranjo of Santa Clara Pueblo: "The clay is very selfish. It will form itself to what the clay wants to be. The clay says, 'I want to be this, not what you want me to be.' The clay forms itself, but if the potter has a 'good intention,' is 'one with the clay' the pot will please both the clay and the shaper. It will be an extension of the potter's spirit." Or choose another quote about pottery or another traditional Pueblo craft. Have the students write about it or discuss it in small groups or the whole class.
- If your school is not near the Pueblo groups, research methods that Native Americans in your area used for making pottery, other containers, or other crafts. Include materials, methods, decorations, and uses. If feasible, make replicas using native materials.
- 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.
- Field Trip:

To learn about Pueblo culture and crafts first-hand, go to a present-day pueblo to research the connections that tie the past and present. Have the students choose particular topics to research while there. To be worthwhile, such a trip will take considerable planning and coordination. Contact the office of the Governor of the pueblo to make arrangements. If the pueblo has a Day School, you might contact the same-grade teacher to see if an exchange study would be possible. Alternatively, plan a visit to a park or museum in which the past, present, or both are featured.

□ **Resources**

Books available from Western National Parks Association www.wnps.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***
- EXPLORING BANDELIER NATIONAL MONUMENT (FOR KIDS) (ISBN 1-87785-658-4), by Sarah Gustafson***

Other books of interest:

- CHILDREN OF CLAY, A FAMILY OF PUEBLO POTTERS, by Rina Swentzell (ISBN 0-8225-9627-X)***
- CHILDREN OF EARTH AND SKY, by Stephen Krensky (ISBN 0590428535)
- HERE, NOW, AND ALWAYS – VOICES OF THE FIRST PEOPLES OF THE SOUTHWEST (ISBN 0-89013-387-5)***
- MARIA MARTINEZ, by Carroll Nelson (ISBN- 0-87518-098-1)
- MARIA, by Richard L. Spivey (ISBN 0-87358-484-8)
- PABLITA VELARDE, Painting Her People, by Marcella J. Ruch (ISBN 0-937206-65-2) ***
- PUEBLO BOY, Growing Up in Two Worlds, by Marcia Keegan (ISBN 0-525-65060-1)
- PUEBLO CRAFTS, by Ruth Underhill
- PUEBLO GIRLS, Growing Up in Two Worlds, by Marcia Keegan (ISBN 1-57416-020-6)***
- PUEBLO STORYTELLER, by Dianne Hoyt-Goldsmith (ISBN 0-8234-0864-7)
- TALKING WITH THE CLAY, by Stephen Trimble (ISBN 0-933452-18-7)
- TENDING THE FIRE, The Story of Maria Martinez, A Biography For Young Readers, by Juddi Morris, (ISBN 0-87358-654-9)
- WHEN CLAY SINGS, by Byrd Baylor, (SBN684-12807-1)

Video/DVD:

- Pablita Velarde ***
- Maria the Potter of San Ildefonso Pueblo ***

***Materials available on free loan from Bandelier National Monument, 505-672-3861 x 513

□ **Site Visit**

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.
- To find phone numbers for pueblo governors, look in www.state.nm.us/oia/triballist.html/
- 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
 - Millicent Rogers Museum*, Taos, New Mexico
1504 Millicent Rogers Rd, Taos, NM 87571 505-758-2462 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
 - Southwest Museum*, Los Angeles, California
234 Museum Dr, Los Angeles, CA 90065 323-221-2164 www.southwestmuseum.org
 - Museum of Northern Arizona*, Flagstaff, Arizona
3101 N Ft. Valley Rd, Flagstaff, AZ 86001 928-774-5213 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
- Contact the proper office at the institution to make reservations, find out if they have materials for use by classes before or during visits, and inquire about practical matters you will need to handle ahead. Arrange for plenty of active, assertive, interested chaperones and inform them as to what responsibilities you expect them to handle.
- 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 appropriate, challenging activities.
- If the institution doesn't provide one, consider developing a worksheet or scavenger hunt, especially for younger students, to focus students' attention and encourage use of observation skills.
- If possible, visit the site on your own before the class visit.

Site visit:

- Make quietly enthusiastic use of any museum, guidebook, introductory talk or movie, exhibits, trails, etc, available at the site.
- 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:

- On return to class, compile a list of similar and different attributes of Ancestral Pueblo and present-day pueblo items seen on the trip, and discuss findings in terms of how traditions are maintained, and what things change. Discuss connections between Ancestral Pueblo times and the present.
- Brainstorm all learning and interesting components of visit. Students write thank you letters to the park/guides using brainstorm list, and illustrate with things they saw or scenes as life might have been at that place in Ancestral Pueblo times.

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.

Web visit:

- Use website images from Pablita Velarde, Helmuth Naumer, Ancestral Pueblo, and archival photographs from the Bandelier collection, www.cr.nps.gov/museum, to supplement activities above. There are also general scenery photos of Bandelier on the web at photo.itc.nps.gov/storage/images/index.html.