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Artful Connections Between New Haven and Mexico

Curriculum Unit 94.03.05
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I teach art, grades 3-5 in a public elementary school where students are predominantly Afro-American and Puerto Rican. Spanish is often a second language. Meso-American Art is my choice of subject for an art curriculum. My broad objectives or general goals are, first, to make a link between past and present by recognizing the connections between ancient Mesoamerican culture and the other cultures I teach. Secondly, since the unit is based on simple techniques of printmaking and paper construction, I shall be making a direct historical link between the ancient art of Mexico using its architecture, calendar and its writing system as the basis for the curriculum which I shall call “Artful Connections Between New Haven and Mexico”. For the unit on printmaking I will attempt to make a direct correlation with early Aztec and Maya pictographs and the childrens’ own graffiti. We will make a “Book of Our Names” out of stamps made of clay. For the 2nd unit on “Constructing Paper Mache Pyramids,” we will build pyramids and refer to ancient building types such as the stone pyramids of the Aztec, and Maya culture. The pyramids will be multi-layered. We’ll build the inner structures from oak tag and the outer structure in paper mache. The layers of construction will be like the layers of a Mesoamerican pyramid. It will allow us room for caches of rocks and treasures.

In my curriculum, I will try to minimize the differences of the various ethnic groups I teach by reaching them on a common ground and il, cultural and age related, the children share a commonalty of school, place and community. I hope this will help minimize the differences when each is asked to participate. What contribution will each one bring from his own family and community? This will add to a zesty unit.

SOURCES FOR UNIT I

Four valuable sources will serve as references. First, the sacred text called Popol Vuh, which in its long-lost original used the Maya writing system of glyphs, describes deeds of the Mayan underworld gods and ends with the splendor of the Mayan lords in their Mayan kingdom. The blending of myth and history is an important element for our curriculum. Popol Vuh tells a Story about creation which is very distinct in its language, creating a meditative and quiet atmosphere. Since Popol Vuh combines the divine and the human it encompasses a mystical or magic quality. A quote from this source: “Now it still ripples, now it still murmurs, ripples, it still sighs, still hums and it is empty under the sky. Here follows the first words, the first eloquence. There is not yet one person, one animal, bird, fish, crab, tree rock, hollow canyon, meadow, forest . . .” (Tedlock, 1985: 4).

In class I will not stress the religious value that the underworld plays, but rather dwell more on the drawings, animals and cartoon-like character of these gods. I would also like to stress the imaginative qualities of the art; for example, the unusual way the figures are drawn with an emphasis on funny root-like extensions at their sides so as to suggest a vegetable animation.

Surely it is this spiritual power which is at the base of all Mayan creativity. It is the main source for the art. In the teaching I will dwell on the magical and imaginative side. I would like the students to find their own interpretations for the designs and motifs surrounding the mystery of the universe.

Another source for ancient texts can be found in the remaining Codices. Many were burned when the Spaniards arrived in the sixteenth century. They are accordion like books made of beaten bark or deer skin covered with a thin layer of plaster and are almanacs for the timing of ritual. In pictures and writing, they record information about which gods and what acts are associated with each day of the calendar cycle. For example we see some Maya gods on the reference page 1. They are “The Principal Divinities of the Mayan Cosmos.”

A third source for the unit are the ancient calendars of the Mayans and the Aztecs. One aspect of the Mesoamerican calendar is the solar cycle, similar to our western calendar. This cycle is based on 365 days, which were then divided into eighteen “months” of twenty days each (Nicholson, 1983: 43-52). The priest-astronomers used very accurate calculations for their calendar. They figured out that it took the earth 365.2420 days to revolve around the sun. Present day calculations tell us it takes 365.2422 days for the earth to revolve around the sun. It is pretty amazing how closely they calculated with such primitive methods.

Monthly festivals were regulated by the solar calendars. Each month was dedicated to a special deity and had a specific festival to honor that god. There were 20 festivals in the eighteen month period. Festivals took place on the tenth or last day of the month (Brundage, 1985: 20-26).

A second aspect of the Mesoamerican calendar is the sacred cycle or the sacred almanac. This cycle is made of 260 days formed by twenty day names and signs which rotate among the numbers one to thirteen, or twenty times thirteen (Carrasco, 1982: 25-28). The Aztecs called the cycle the Tonal pohualli, the “sacred count of days”; (Brundage, 1985: pp. 20-26), the Maya referred to it as the tzolkin, the “count of days” (Huff, 1984: 2-4). The Tonalli was the Aztec “sacred day” and was connected to destiny and fate.

The Aztecs were given names that were simply their dates of birth on the Tonalpohualli. One’s birthday was celebrated on the almanac date, not by the annual cycle. One’s future was determined by his or her date of birth. Every day had a fortune; good, bad or mixed. Each person worshipped his or her day sign for fear it would turn against him. If a person was born on the five nameless days at the end of the solar year, he or she was guaranteed a short and miserable life. That person had no true name or birthday. (Brundage, 1985: 20-26).

The complete Mesoamerican calendar is called the calendar round, or the sacred round. It meant that any given combination of an almanac day and solar day would not occur again for 52 years. Archaeologists call this 52-year cycle the calendar round. The Aztecs called it the “Xiuhmolpilli” or bundle of years.

The Meso-Americans believed that at the end of the fifty-two years, the world could come to an end. The Aztecs would extinguish all fire, lock up pregnant women for fear they would turn into wild animals, pinch children to keep them awake for fear they would turn into mice, break all their pottery, and sweep their hearths clean in preparation for the end of the world (Weaver, 1981: 164-175). The priests would then ascend

to the top of the great fire mountain to wait until the constellation Pleiades reached the center of the sky (Filsinger, 1984) There would be a sacrifice and then a new flame would be kindled and spread over the valley. This “New Fire” ceremony showed the people that the world would continue for another fifty-two year cycle.

The Maya calendar recorded each day and month in the solar year with its own glyph. For the Maya, these records were a focus of artistic achievement and often found carved on the ruins of many temples and statues. The classic Maya believed that there were “time bearers” gods who took turns carrying time. They believed in four different time bearers in a fifty-two year cycle each one “carrying time” for thirteen years and then passing it on to the next (Filsinger, 1984).

Through the extensive calendrical records, the Maya in particular recorded history. Part of the recording of history is the recording of names and “titles.” What is a title? Something like “Lawgiver” or “King of Kings” or “The Great” or “Junior.” Place names follow personal names, usually to be translated last in the Maya glyphs, such as “Sacred Lord of the Such and Such Place.” When we appropriate this glyph in class, we will make a place name too, for “Sacred Children of the Prince Street School.”

We will use both Maya and Aztec symbols for “Our Book of Names”. Among the Aztec, books of calendrical auguries were used to divine horoscopes for newborn children. Many children even took their names from the days of birth. Such names included monkey, deer, house, flower, and so forth. Many of the pictographs found on reference page three and four were mass produced as stamps.

Stamps were a great part of the indigenous culture of Mexico and are the 4th and most valuable historical source for Unit I. As small baked clay objects, they survived the ravages of time. In Mexico, the oldest clay stamps were hand modeled, then with increasing demand, there arose the introduction of a new technique; the mold made stamp, for mass production. Pliable clays were used for this purpose, and baking was done in primitive and open kilns, heated by wood and covered with straw and leaves, similar to those still in use by modern day potters.

The stamping process was frequently used to decorative pottery. Flat and cylindrical forms were used for stamping flat surfaces, while concave forms were used for convex surfaces. Different handles, flat conical or rattle shaped determined the manner in which the stamp was to be applied, i.e. rolling-pin shape stamps could be used with both hands.

The Indians were familiar with a great variety of vegetable and mineral dyes. Some used commonly were: smoke black from pine trees, Chimaltizatl for white, the tree of blood for red, Zacatlascal; a parasite of tropical trees for yellow, indigo for blue; indigo mixed with white and alum for turquoise blue. Colors were ground and mixed with oil of chia, or alum.

Since stamps were articles of trade they were often found in places which were not necessarily their place of origin. In Peru, gourds were carved to be used as stamps (Enciso 1973: Intro.)

PREPARATION AND METHODS FOR MAKING THE CLAY STAMP

The objective in the first part of this unit is to connect new ideas with techniques of working with clay and about printmaking. It takes a good deal of preparation of materials for this to take place. There needs to be available about 25 lbs. of sculpee clay. This is to be cut up into 100 small pieces. Since I will be teaching this to two classes, only one piece or 1/4 lb. per student is allotted. We need wires for cutting, small squares 6”x6” of masonite to work on, paper towels (1 clay roll) and small plastic bags (baggies). Also cutting tools are needed such as wooden sticks (popsicle) or pottery tools with wire beads. Little cups for water are needed. A shelf or drying area will be needed. Sponges and large sheets of plastic for storage are helpful.

Each student needs to be outfitted with a cup of water, a base to work on, such as a square of masonite, 1/4 lb. of clay, a wooden tool, and a plastic baggie and damp paper towel.

Other Materials for “Our Book of Names” Project

> 18” x 24” white arches paper folded into 6 columns (each column measures 4” across x 9” down)/sponges/newsprint/ newsprint for practice printing/ printing inks and primary colors of red, blue and yellow/ paper towels/ black magic markers/ scissors/ 3” rollers for printing

After we make individual clay stamps, we can combine them into a printed book called “Our Book of Names.” It will be a nice way to share one another’s work in this project. The pages of this book will be accordion pleated (6 pleats) and when opened up a full view of the names is afforded. Tiny printed footprints will connect each name stamp to the other. There will be six columns and about four stamps or prints on a folded column. The style will be informal and the prints will be placed randomly along the length of the column with little footprints leading between each of them. The paper should be weighty enough to retain the fold and accordion pleat. The name stamps shall be made of clay and then dried well before we use them to print with. We will need to make footprint stamps too. The pleats are to be folded first before printing begins. To print we will need three shallow tin trays filled with 3 primary colors of printing ink (red, yellow, blue) and rollers to roll out the ink. To print we press the clay stamp into the rolled out ink and press it again onto the accordion page. The printing of one book can be done in one class period of 45 minutes. There should be room for text on the cover page of “Our Book of Names”.

UNIT I—AZTEC PICTOGRAPHS AND MAYAN GLYPHS

It will be fun by starting out in this unit to see how the children perceive the art of Mesoamerica. First we can look at several ancient illustrations to familiarize ourselves with the Maya symbols and how they designated status, place, date and character traits. On reference page 2 for Unit I there is a picture of “Lady 6 Sky from Tikal place, the pillar of the community.” By looking carefully at the details of the picture we can draw responses from the class about the lady. First we ask, “What do we see?” She is a noble woman and this is evident by all the embellishments of the picture. I can point out the number glyphs on the reference page to the children and ask them to write their age in symbols too. Secondly, we will consider the stamp pictographs made by the Aztecs and their predecessors in Central Mexico. Each child will be asked to copy a symbol he identifies with from the reference page of pictographs, page 4. These can be in the form of animal names and

signs from the natural world (wind, water, etc.). We will inscribe these name signs into our clay stamps at a later time.

Unit I—Lesson III—Making Our Own Numerical Glyphs & Pictographs

Objective- They tell us about our status in Prince School. This project can also have dual purposes: to learn about pictographs and number glyphs. Refer to page 1 of the reference page for Unit I and use them for our age glyphs.

Motivation—Teaching aid—Foam core format of a glyph.

(figure available in print form)
Students can practice:

Name of School

Room Number

Grade

Male or female?

Pick a birthday pictograph

Materials—Colored construction paper

scissors

pencils

glue

magic marker

numerical chart xeroxed

Procedure—Demonstration—hold up the foam core glyph and pull each part off—call each part a number (1-5) and say that the glyph conveys a message about someone's place in school. Then ask each student to use the numerical chart to put their age on the glyph — to put their grade on the glyph — to put their school on the glyph — to put their room number on the glyph — use symbols to say girl or boy.

Making Glyphs & Pictographs

Give out paper, magic markers and glue for them to make their own number glyphs After they have completed their cutting and gluing give out magic markers for writing inscriptions. Ask them to choose a pictograph for their birth date.

Sharing Glyphs

Can we read each other's glyphs?

UNIT II—CONSTRUCTING PAPER MACHE PYRAMIDS

In the purely geometrical sense, the term pyramid can be applied to the constructions of the Egyptians whose bases are polygonal and whose faces are defined by triangular planes meeting at the summit (Stielin, 1963: 97).

The Meso-Americans designed their pyramids with rectangular or square bases and gave them different functions as well as a different design. Some pyramids are sacred. The priests ascend them to meet the gods; nobles go to pyramids to commune with their ancestors. The Mayas crowned their pyramids with lofty temples (Stierlin, 1963: 98) Although most have only one staircase, some temples with pyramidal bases sometimes have staircases on all four sides. In the Mayan "Castillo" of Chichen Itza this is the case. (All pyramids mentioned and described below are to be found illustrated on reference page 5.)

The Castillo at Chichen Itza is a construction which dates from 10th or 11th century A.D. It is a great step pyramid flanked by four staircases bordered by ramps and surmounted by a well preserved upper temple.

The Temple of Inscriptions at Palenque is a pyramid with nine distinct levels, which certainly might have been an imitation of the nine layers of the underworld (Miller, 1986: 129). It is flanked by a staircase on one side and set into a hill which offers a dramatic backdrop for it.

The Pyramid of the Sun at Teotihuacan is one of the largest structures of pre-Columbian Mesoamerica. During excavations in 1971, a cave was found under the pyramid where several chambers are connected in a clover design (Miller, 1986: 68-69). The broad staircase is the focus of the building. On one face of the pyramid the broad flight of steps divides into two parts and then further up comes together. These steps functioned as backdrops for public events and rituals and created a great spectacle for those watching below.

The Pyramid of Huitzilopochtli and Tlocloc at the Aztec capital of Tenochtitlan is a twin pyramid to honor the two deities. Both pyramids were framed in the distance to the east by two volcanic mountains. In the rainy season to acknowledge Tlaloc, the god of corn, the sun rose behind that temple. But in the drier months, the sun came up behind the temple of Huitzilopochtli, the god associated with hunting and fire.

UNIT II Strategies

The illustrations depicted on reference page 5(figure available in print form) will be an aid to the class when they are building the pyramids out of oak tag. Later when they cover the oak tag with layers of paper mache they can further embellish the pyramids with even more details, including decorative sculptures. The final part of the unit is the painting of the pyramids. Guilds of sculptors and pottery craftsman can be called on for these details.

Unit II Lesson I—Building Pyramids

Objective—To build our own pyramids like those in Mesoamerica

To explore

1. Why they existed?

2. How they were constructed

3. The various kinds of pyramids—3 sided Egyptian

Materials:

Oak tag paper 12” x 9”

scissors

masking tape

pencils

rulers

> 4 illustrations on reference page—Tenochtitlan, Chichen, Itza, Teotihuacan, Palenque (Aztec and Mayan Pyramids)

Motivation: Demonstrate making a constructed pyramid.

Procedure:

Ask class to trace the pattern of the pyramid when it is open. When they cut it out they can fold the comers and tape the finished pyramid. Why do we use symmetry to describe the pyramid.

Unfolded paper pyramid to use as a pattern

(figure available in print form)

Unit II—Lesson III—Making Additions to our Constructions

Objectives Building tombs inside the pyramids

Decorating the outside with temples and sculptures

To make use of learning from the film about ChichenItza.

Building tombs and staircases on all 4 sides

Adding a temple on top

Materials: Oak tag paper (8” x 11”)

Masking tape

rulers, pencils

scissors

Procedure: How to fold accordion stair cases.

How to make decorative sculpture.

How to build temples.

Lesson IV—To learn to do paper mache

Objective:

1. To make a paper mache mummy

3. To aim towards good craftsmanship in handling the technique Materials: wallpaper paste

water

6” plastic containers and 2” cups

newspaper strips 2” x 6”tl” x 4”

scissors

paper towels

sponges

plastic spoons

masking tape

Motivation: Do a demonstration of paper mache for the class. Choose one of the better constructed pyramids done in an earlier class. Have a student work on that while I make a mummy and cover it with paper mache.

Procedure:

1. Cut up strips of newspaper 2” x 4”
2. Mix wallpaper paste and water in larger container. Use 10 teaspoons paste to 2 cups of water—enough for 8 students. Pour into smaller cups.
3. Give out cups and strips of newspaper to all students.
4. Give out larger 4”x4” newspaper to roll into the shape of a mummy.
5. Tie the mummy roll with masking tape into a cylinder shape
6. Wrap the very wet newspaper strips around the cylinder
7. Put some strips of newspaper into the smooth paper mache mixture. Remove excess mixture from paper strips before wrapping around cylinder.
8. Aim towards careful handling of materials.

(figure available in print form)
Reference page 1
(figure available in print form)
Reference page 2
(figure available in print form)
Reference page 3
(figure available in print form)
Reference page 4
(figure available in print form)
Reference page 5
(figure available in print form)

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