Science: Draped slab leaf bowls

GRADE / AGE
3rd grade

TEACHING GOALS/OBJECTIVES
Students will learn to explore beauty in nature and the structure of the leaf/purposes of the leaf – it’s connection to science. Students will learn the draped slab forming technique, exhibit skills and craftsmanship in handling clay and glazing.

TECHNIQUES / SKILLS
Slab making, cutting shapes via tracing, pressing texture into clay.

LESSON LENGTH
1 class, approx. 1 hour & 20 minutes

MATERIALS
• fresh leaves (large size like Sugar maple)
• canvas cloth
• rolling pins
• clay
• guide sticks
• clay modeling tools
• water/slip dishes
• Styrofoam bowls
• plastic wrap (optional as a separator)

SUBJECT MATTER
Talk about the purposes of leaves - introduce some of the science terms. What do leaves do for the trees? Talk about symmetry in nature - design in nature (get help from
your science teachers if necessary). Present some examples of ceramic slab vessels and sculptures. Demonstrate wedging clay - rolling out - pressing in leaf - cutting with tool --smoothing edges-- and pressing gently into Styrofoam bowl.

**LESSON DESCRIPTION**

Let students choose leaves, discuss textures and shape of leaves, determine if symmetry is present. Distribute slab of clay to each student, they roll out the slab to the size needed (use guide sticks to insure even thickness) and press their leaf firmly into the clay. Cut around the leaf with a craft stick (or clay needle if available) and gently smooth cut edges with water/slip. Carefully lift the leaf and clay into a bowl, gently pressing it into the shape of the bowl. Remember to keep the leaf on the clay so that while you are pressing the leaf into the bowl you are also pressing the texture into the leaf. When the clay is secure in the Styrofoam bowl the real leaf should be peeled off and discarded (leave may be left on the clay as it will burn off in the kiln). I had the students write their names on the bottom of the Styrofoam bowl before we started the project and then I inscribed their names on the bottom of the clay when I was able to lift it from the bowl on the following day. When I lifted the clay from the bowls the shape of the clay leaf remained in a bowl shape. After drying and firing the students finished with a glaze choosing from "leaf " colors like yellow, orange, red, brown, green. Some students layered the glazes with very interesting results. I had several colorful photographs (from calendars) of autumn foliage hanging on the wall near the glazing table to inspire them. This project is one where every child is successful and the final product is a great surprise to the children as the glazes mix. Another art teacher told me she has done a similar project using pumpkin leaves, which produce much larger bowls. The teachers at my school have requested an art in-service next fall so they can make bowls of their own.

**LINKS**

http://urbanext.illinois.edu/gpe/case1/c1facts2c.html
http://www.sciencemadesimple.com/leaves.html

**WHICH VISUAL ARTS CONTENT STANDARDS (VACS) AND BENCHMARKS (B) WILL BE ADDRESSED IN THIS LESSON AND HOW?**

**CATEGORIES**

Science

**IMAGES**