Kindergarten class project: Clay plaques with nature pressings

Lord Strathcona Elementary School, June 2022

Prepared and facilitated by Hillary Webb, with assistance from Oscar Joseph

Overview

This project was done with a kindergarten class (ages 5-6) at Lord Strathcona Elementary, in the Downtown Eastside neighbourhood of Strathcona in Vancouver BC. This was my son's class and he assisted with making the sample I based the project from. He also helped with the explanation of the project to his classmates. Some of the children had worked with clay before, but for most this was their first opportunity. They were excited to learn about ceramics as a practice, and the steps involved in making something out of clay. This project can be adapted by others looking for a simple and engaging clay project. The adults who work in the classroom enjoyed making the plagues as much as the students.

Preparing a Sample

For this project I used Plainsman M332G Brown grogged sculpture clay.

The sample was completed with a round of clay that was hand formed into a pancake shape, 4" across and approximately ¼" thick. Objects from nature were pressed into the clay using fingers and a rolling pin. The clay was moist and malleable, therefore the pressure needed to make an impression was very light.

Prep before the classroom visit

For the classroom project, two days before the visit to the classroom I measured equal weight for each round of clay (365g), rolled out slabs, compressed the clay to ensure there were no air bubbles, rolled flat again, then used a bowl as a template to cut a circle. Two holes were made at the top. These rounds were spritzed with water and covered in plastic.

Working in the classroom

On the day of the class project, we gathered for circle time, and I presented the project to the students. I showed them the completed sample and some other objects made from clay. I talked about the process of how clay is made, how objects are made from the clay, and the process of firing and glazing. We walked around the school yard finding objects that would make a good impression in the clay. Students gathered leaves, flowers, pine needles and cones, a discarded piece of LEGO, and sticks with lichen. I also brought objects to supplement what they found, including a fern frond, maple keys, and little cedar cones.

Back in the classroom, I moistened the surface of the clay with a damp sponge. Students laid objects on the clay, and we used a small roller to create an impression. Students located the correct letter stamps to make their name, along with the year.

Firing and glazing the project

The clay was fired to cone 04 (1870 °F). The colour of the fired clay is light-medium brown. I found this colour to be somewhat uninteresting on its own, so I decided to brush on a red iron oxide wash (1 part red iron oxide and 3 parts water). This was brushed over the surface of the bisqued clay and sponged off the surface, so it sat in the impressions. The surface of the rounds with the impressions was then dipped into a glossy white glaze. The glaze was sponged off the surface, so the glaze sat in the impressions.

They were glaze fired to cone 6 (2232°F).

Glossy white glaze

Ferro Frit 3134 -- 33.00 Custer Feldspar -- 24.00 Silica -- 19.00 Whiting -- 14.00 Ball Clay -- 10.00 Zircopax -- 10.00 Bentonite -- 2.00 *TOTAL 112.00*

Completing the project and delivery

A string was tied through the top two holes and knotted at the back. This is how the round is hung. The completed project was wrapped in tissue paper and placed in a cloth bag with a string tied around the top with the student's name on a paper tag.

The students (and teachers) were very happy to receive their completed projects. I received very positive feedback from parents. One parent shared that their son cherishes his project, and it is hanging on the wall of their house.

Lessons to be learned:

The clay was not soft enough. In my efficiency of pre-rolling the rounds, the clay dried out too much. Prepping two days before the activity was too much time for the clay to stay malleable. This resulted in many cracks where the children pushed down on the natural objects and the letter stamps. While the rounds were drying, I needed to repair many cracks so they would survive the firing without breaking into pieces. Rolling out the pieces in the moment would have been more successful.

A red clay such as Plainsman M390 or IMCO Red Velvet would look nice with the glossy white glaze, and make the step with the red iron oxide unnecessary to achieve the contrast in colour between the glaze and clay.

I completed this project during a sabbatical leave in the spring of 2022. My recommendation is to do this project in the fall when there is a lot of natural debris available (fallen leaves, etc.). The cooler weather is also more forgiving as the clay dries slower.