Lesson #1

Ceramic Tile Wall Murals

Having students create ceramic tile wall murals affords a unique all-school experience that can be both art room and classroom-based. A project such as this incorporates the important fundamentals necessary to a good art lesson as well as providing a basis for science, social studies, writing, and geography lessons. Students, faculty, and administration are all brought together in making a very original, important contribution to the school that, because of its permanence, is a continuous source of pride.
Lesson Goals and Objectives:

1. Students will design and produce ceramic tile wall mural(s) for permanent installation in the school, learning the various art techniques necessary to create this project.
2. Classroom lessons and activities are planned based on the theme of the mural, providing opportunities for lessons in geography, science, writing, and social studies. Possible subjects for murals are outerspace, undersea life, jungle animals and plants, local history, athletic events, portraits, dinosaurs, circus, flower gardens, local famous landmarks, etc.
3. In addition to the obvious educational benefits of this project, students also gain a positive sense of pride from helping to create art that becomes a permanent part of their school.

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Background Preparation:

1. The art teacher should talk to students about what they will be creating, explaining the physical and production differences between a painted mural and a ceramic mural. Examples of murals should be shown.
2. Depending on the subject that has been chosen for the mural and, if illustrations are available, students should be shown examples of work with similar themes and styles by famous artists. For example, present art reproductions of works by Rousseau for the jungle theme; works by Seurat, Moillet, and Lawrence for the circus; works by various Impressionist artists for flower gardens; and selected famous portrait paintings for a theme that involves faces and people.
3. Using the theme of the mural as a focus, classroom teachers and the art teacher should work together to design lessons and provide support materials, so that students have a thorough background understanding of the subject. For example, science lessons can be planned on the study of outerspace or undersea life; social studies lessons can focus on local history or a famous local landmark; writing lessons can be designed with various aspects of the circus as the subject; and ecology and “saving our rain forests” lessons can be inspired by a jungle theme.

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Glossary of Terms:

Bisque — unglazed pottery after first firing.
Enlargement — something that has been made bigger or reproduced in the same proportions in a larger size.
Fire — a term used in ceramics; to heat the clay in a kiln at a very high temperature until it is dry and hard and becomes pottery.
Glaze — a special clear or colored liquid mixture that is applied to pottery and becomes a hard glass surface when fired to the right temperature in a kiln.
Kiln — an oven or furnace that reaches very high temperatures (2000° to 2300°) and is used for drying, firing, and glazing ceramic ware.
Mural — a wall painting, usually performing an architectural function.
Perspective — a way of looking at something; a way of showing 3-dimensional objects on a 2-dimensional surface.
Template — a pattern.
Tile — a thin, rectangular or square piece of fired clay.
Underglaze — a special type of color that is put on a ceramic piece before the glaze. It has no flux (glass former) in it so it stays where it is put when fired and is good for detail work. It is used for painting and decorating.

Supplies:

Drawing Paper (uniform size)
White Craft Paper (exact size of mural)
Pencils and Crayons
Newspaper (to protect tables and desks)
Assorted AMACO® Brushes
AMACO® 6" x 6" Bisque Tiles
(Catalog #11333L)
Assorted AMACO® Liquid Underglazes
(LUG Series available in pints,
2 oz. jars and sets)
Assorted AMACO® Velvet Underglazes (V Series)
AMACO® Clear Gloss Glaze
   (LG-10 Catalog #39143A)
Slip Trail Applicator (Catalog #11446N)

Optional Supplies:
Velvet Underglaze Selector Chart
   (Catalog #19048Y)
LUG Underglaze Selector Chart
   (Catalog #37588B)
#1 Tile Sitters
   (Catalog #11306G)

Equipment:
Opaque Projector
Ceramic Kiln, shelves, posts and stilts

Instructions:
1. Have students draw individual drawings on uniform pieces of paper of different aspects of the larger mural. For example, for the jungle animal mural have different students draw different animals, have some draw trees and plants. Encourage personal ideas and perspectives.

2. Using an opaque projector, project the art work onto a large piece of white craft paper to the desired size of the finished mural. Compose the many drawings into the scene desired and trace them on the large paper.

3. Have students color the enlarged picture with crayons to indicate specifically what colors all areas will be. Seeing the mural colored will give you the opportunity to modify or change colors, as necessary, before working with the tiles and underglazes.

4. Using the tiles as templates, have the students lay them on the finished drawing and trace around each one. Then cut the paper mural drawing into the squares. A five foot square mural will end up as 100 6” x 6” square paper templates.

5. Work on a large, flat surface where the tiles can be laid out in order to avoid mistakes and confusion. Use arrows to show direction of tiles and number them by row on the back with a black underglaze so that those who install the tiles will know where they go. (Example: 1-1, 1-2, 1-3..., 2-1, 2-2, 2-3..., 3-1, 3-2, 3-3...and so on.)

6. Lay out the cut pieces of the paper mural on top of the tiles like a puzzle, and using carbon paper, trace over the drawings onto the tiles. Be sure to have the students get as much of the detail transferred as possible.

7. Using underglazes, the students then paint the tiles just as the paper squares have been colored. For opaque coverage, apply 3 coats of underglaze.

8. A plastic syringe with black underglaze is then used to outline and detail the drawings.

9. The teacher should then airbrush the entire surface with a clear glaze and fire the tiles to cone 05.

10. Tiles should be installed by a professional tile installer. For added effect, use 2” cap white commercially glazed border tiles around the mural as a frame.
Additional Suggestions:

1. Hallway walls, gymnasium and cafeteria walls, and walls around drinking fountains and doorways are all perfect for tile murals. Work with school administrators and be creative. Before beginning, however, confer with a professional tile installer to be sure the wall or area you have chosen will work. Tile murals are a very exciting way to brighten up areas of a school that are notoriously drab.

2. Use 6" x 6" unglazed commercial bisque tiles. It is technically difficult to make handmade tiles consistently flat. Commercial tiles are guaranteed to be flat and uniform in size and thickness and will only require one glaze firing. When working with elementary students, this makes the process much easier and allows the focus to be on creative design rather than tile construction.

3. Use underglazes to create the picture or design on the tiles. They are safe and easy to use and may be applied with a brush or plastic syringe. Underglazes do not move or bleed when fired. AMACO® underglaze colors change slightly when fired; Velvets do not. Both become deeper in value when fired with a clear glaze over them.

4. Clear glaze can be applied by pouring it over the tiles in one of two ways to collect glaze run off:
   1. Place the tile inside a bucket on top of a glass bottle (or any suitable object that keeps the tile above the bottom).
   2. Hold the tile in your hand over a bucket.
Remove glaze from the edges and bottom of the tiles with a wet sponge. Glaze collected in the bucket can then be re-used.

Clear glaze can also be brushed on with three even coats applied in different directions, making sure each coat dries before subsequent applications. NOTE: If brushing, it is best to fire the underglazed tiles first before application of clear glaze. This will eliminate smearing caused by dampening the unfired underglaze surface. Then brush on clear glaze and fire again to Cone 05.

5. Load kiln in the afternoon and fire at setting 2 (low) throughout the night. The next morning, turn the kiln up in stages and fire to cone 05. This means the kiln will shut off during the school day, so someone will be present to monitor the crucial part of the firing. If you fire by this time schedule, you won’t have to make late night trips to the school to check the kiln.

Approximately 60-80 6” x 6” tiles can be starched and fired in a 22” x 27” chamber kiln.

Notes:

Follow-up Idea:

Share your success with parents and the community. Coordinate the unveiling of the wall with a school function and invite parents and the local newspapers. This is a wonderful way to get positive publicity for your art program.

This is one lesson in a series of art lesson plans for elementary and secondary programs using American Art Clay Co., Inc. products. Successful lessons will be considered for future publication. Send your ideas and slides to David Gamble, Vice President, Director of Marketing and Education — Educational Division, American Art Clay Co., Inc.