Lacquerware Boxes

A lesson for students ages 7-10, grades 3 & 4
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I. Theme/Subject:

This lesson is based upon Japanese lacquerware and the Allen Memorial Art Museum’s (AMAM) document box and tray from the Meiji period (accession # 1954.89). Below is an excerpt taken from the AMAM website, http://www.oberlin.edu/allenart/collection/japanese-docbox.html, written by former Curator of Asian Art Charles Mason.

Asian lacquer is derived from the sap of the tree rhus vernicifera. When refined, brushed onto another surface, and allowed to dry, it provides a highly durable finish that protects against temperature, humidity, and insects. Long admired in China, Korea, and Japan for both its protective and aesthetic properties, this medium has been used for millennia in the manufacture of a variety of objects, from food utensils to storage containers for paper, textiles, or other materials sensitive to environmental damage.

Primitive lacquering was known in Japan as early as the third century B.C., but did not develop into a significant art form until the introduction of Chinese lacquering techniques in the seventh or eighth century A.D. Japanese craftsmen quickly developed the art in new ways, and by as early as the tenth century A.D. a uniquely Japanese style of lacquer work had already appeared. The most distinctive characteristic of Japanese lacquers is the extensive use of the maki-e, or "sprinkled picture," technique. Maki-e lacquers are created by sifting powdered gold, silver, or copper through fine bamboo tubes onto a wet lacquer surface to create a design. Once the lacquer has dried, the design can either be polished flush with the surface of the vessel (hiramaki-e), built up with extra layers of lacquer and powders to create a relief effect (takamaki-e), or covered over with additional coats of lacquer which are then partially ground away to give the appearance of the design emerging from the surface of the vessel (togidashi maki-e).

Raw lacquer is highly toxic and must be applied slowly and with great care. Moreover, each coat of lacquer must be fully dry before the next one can be applied. Since the surfaces of lacquer vessels may consist of several dozen...
coats of lacquer, the manufacture of lacquered objects may take months or even years of intermittent labor to complete. Because of these labor costs, combined with the costs of the precious metals used in the *maki-e* technique, high-quality lacquer wares were often extremely expensive.

C. Mason

II. **Objectives/Concepts:**
1. Students will learn about the Japanese art of lacquer.
2. Students will visit the AMAM and view the Japanese lacquerware document box and tray.
3. Students will create their own box by mimicking the process of lacquerware.
4. Students will learn about an aspect of Japanese culture from the Meiji period.
5. Students will understand the complexities behind the process of creating lacquerware.

III. **Standards:**

A, National Standards:
1. Visual Arts
   - Standard #1: Understanding and applying media, techniques, and processes
   - Standard #4: Understanding the visual arts in relation to history and cultures

B, Ohio State Standards:
1. Visual Arts
   - Benchmark 1C: Identify and describe the different purposes people have for creating works of art
   - Benchmark 2A: Demonstrate knowledge of visual art materials, tools, techniques and processes by using them expressively and skillfully.
   - Benchmark 3B: Apply comprehension strategies (e.g., personal experience, art knowledge, emotion, and perceptual and reasoning skills) to respond to a range of visual artworks.
   - Benchmark 4A: Apply basic reasoning skills to understand why works of art are made and valued.
   - Benchmark 5B: Use the visual arts as a means to understand concepts and topics studied in disciplines outside the arts.

2. Social Studies
   - Obtain information from oral, visual and print sources.
   - Use historical artifacts, photographs, biographies, maps, diaries and folklore to answer questions about daily life in the past.
   - Identify and describe examples of how science and technology have changed the daily lives of people and compare (the uses...
of lacquer in some instances were eventually replaced by modern plastics and sealants)

IV. Vocabulary:

- **Carved lacquer**: (diaoqi) Method of decoration that involves carving built-up layers of thinly applied coats of lacquer into a three-dimensional design.
- **Engraved gold**: (qiangjin) A decorative technique in which an adhesive of lacquer is applied to fine lines incised on the lacquer surface, and gold foil or powdered gold is pressed into the grooves.
- “Filled-in”: (diaotian or tianqi) Decoration in which lacquer is inlaid with lacquer of another color. There are two methods of filled-in decoration: one involves carving the hardened lacquer and inlaying lumps of other colors; the other is called “polish-reveal.”
- **Hira Maki-e**: A flat lacquer decoration with no relief. The powdered metals are sprinkled onto the surface while the coating is still wet. Then another coating is applied. At the end the surface is polished flat.
- **Lacquerware**: A decorative work of art usually made of wood and coated with lacquer, an organic sealant.
- **Maki-e**: The general term in Japanese for lacquer decoration in which gold or silver powder is sprinkled on still-damp lacquer. There are three forms: hira maki-e (flat), taka maki-e (relief) and togidashi maki-e (burnished).
- **Nashiji**: A Japanese lacquer technique that produces a reddish, speckled surface, also called “pear skin,” by the sprinkling of especially fine, flat metal flakes over the half-dry lacquer base.
- “Polish-reveal”: (moxian) A variety of “filled-in” lacquer decoration. Thick lacquer is applied repeatedly in certain areas to build up a design; then the ground is filled with lacquer of a different color and the entire surface is polished down to reveal the color variations.
- **Taka Maki-e**: A lacquer technique where several coats of lacquer are applied to a surface to achieve a relief effect. Taka maki-e is the most difficult of the Japanese lacquer techniques and requires very high skills.
- **Togidashi Maki-e**: In this technique, the design is painted in lacquer, and gold or silver powder is sprinkled over it; when the lacquer is dry, another coat is applied to the design to fix the powder. *Ro-iro-urushi* (black lacquer without oil) is then applied over the entire surface, and, after it has dried, it is burnished briefly with charcoal.
- **Urushi**: A lacquer from the Japanese urushi tree. It imparts shiny and durable appearance. Urushi is usually black but can be of different colors with the addition of metallic pigments.

V. Materials:

- Cardboard box
- Modge Podge
- Pencil

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VI. Strategies and Procedures:

A. Engage (motivation):

Introduce the lesson by explaining that lacquerware is an ancient art in both Japan and China. Lacquer is usually painted over a wooden base, but can also be painted over baskets, paper, or other materials. Lacquer is actually the resin of the lacquer tree and is very poisonous in its natural form. It is collected, strained, heated to remove some of the moisture, and then painted on a base, either in its clear natural form or with coloring added to it. Black and red are common colors, and the Japanese often highlight a design with powdered gold paint. Many base coats are painted on and carefully dried away from dust before final decorations are added. Today many people use plastic copies of lacquer items because they are less expensive.

Handouts:
- Lacquerware: AMAM’s document box
- Japanese Lacquer: *Finishing Layers and Decoration*
- Japanese Lacquer: *Origins and Production*

B. Explore:

Students will discuss the process of making lacquerware, exploring different techniques such as the three kinds of maki-e. Referring specifically to the document box in the AMAM’s collection, students will examine the work and determine which technique was used where. Students will view a variety of techniques used in Japanese lacquerware, and be able to identify which methods were utilized to achieve different effects.

C. Create:

Students will create their own ‘maki-e/ lacquerware’ boxes.

Procedures:

*(Students will be using unfolded cardboard box sets ordered from http://www.ssww.com/)*
1. Using a sponge brush, paint brown side of cardboard with black acrylic paint.
2. Let dry.
3. Using sponge brush, paint bottom box with gold acrylic paint.
4. Using pencil, lightly draw design onto box lid.
5. Color in design using colored pencils.
6. Use metallic gold pencil or marker as an accent.
7. Fold box lid along each edge so that the painted sides are facing out.
8. Secure corners with white glue and tape or paper clip the glued corners until they are dry.
9. Repeat steps 8 and 9 for the box bottom.
10. Using a sponge brush, apply a thin coat of Modge Podge to the entire box (all sides of lid and bottom)
11. Allow box to dry for 24 hours.

VII. Assessment:

Student projects can be evaluated according to the following criteria:
• Did he/she follow directions?
• Did he/she need constant assistance or did student work independently?
• Neatness
• Clean-up of materials and work space
• Does the student’s design incorporate symbolism seen in Japanese lacquerware?

VIII. Closure:

Students will visit explore the art of Japanese lacquerware via the Internet. Students can view the lacquerware document box at: http://www.oberlin.edu/allenart/collection/japanese-docbox.html, or arrange a visit to the Allen Memorial Art Museum.

IX. Across the Curriculum:

A. History: Research other cultures that use lacquer. Find out what lacquer is used for and how long they have been incorporating it into their lifestyles.
B. Science: Have students research the lac tree and its properties. Compare the qualities of lacquer to that of other materials such as plastic, metal alloys, etc.
C. Music: Students can research different instruments that once used lacquer as a protective coating. Have students find out how lacquer may or may not change the quality of the sound produced versus modern day materials that are used.

X. Resources:
A. Books:

B. Websites: