

All Roads Lead to Mud

Lesson plan: African Mud Textiles



Fig. 1 Applying the mud-cloth helper to leaf-dyed 100% cotton. Fig. 2 Marionette costume (unsewn) painted and stenciled with mud-cloth helper. This fabric is still covered with the mud and not rinsed or bleached. Fig. 3 Finished marionette in two-piece outfit. Yoke has a hand-drawn pattern. The sleeves and trousers have been stenciled with mud-cloth helper. The stenciled design on the sleeves was copied from a Bogolan outfit worn by Fuerst's guide. The Foreground design and the design of the trousers comes from a stencil used by Fuerst in Segou. The centerpiece of the design is a Dogon Kanaga figure with raised arms.



Fig. 4 Birch trees in Walnut Creek, California. Fig. 5 Harvested California Birch leaves drying. Fig. 6 California birch leaves ready for simmering.



Fig. 7 100% cotton simmering in the birch-leaf liquor. Compare the color of the cloth in the pot with the color on the sleeves of the marionette above.

Presenter: Ann H. Fuerst, Ph.D.

Grade Level:

K-12 All grades with adult supervision increased in lower grades.

Background Information:

The roads taken to develop this lesson on textile decoration using natural dye (Basilan) and using mud (Bogolanfini/Bogolan) were long and unique.¹ One of those reasons has to do with access—access to the greatest living artisans creating mud textiles and access to the particular mud and plant life they use without going through customs.

This lesson combines the results of the finest scientific research and an idea to give children an opportunity to understand the historical and scientific contributions and cultural dimensions of the visual arts.²

The roads leading to the finest mud cloth artisans are in Mali, Africa. Fuerst's interest in mud cloth was peaked when she visited a Segou studio and took a lesson in 2002. The women, however, credited for making the most beautiful mud cloth are Nakounte Diarra of Kolokani, Mali in *Bogolanfini* textiles and Founemouso Sakiliba of Bamako, Mali in *Bogolan* textiles. In a stroke of good fortune, in Washington, D.C., 2003, Fuerst went half way to meet and observe them both applying their mud to cotton in the USA. One applied mud with sticks and the other used stencils. Fuerst met with Diarra at the conclusion of the Festival and subsequently received the remainder of the mud the artist transported from Kolokani for the *Bogolanfini* demonstration. Because Fuerst hoped to replicate the mud cloth experience with children in the United States, she sought an analysis of the dark material. The United States Department of Agriculture (USDA) analyzed the mud and provided the data on the minerals the mud contained for replication of art projects in American classrooms.

Mud Quest 101: 1. go to Segou, Mali, Africa and take a lesson; 2. return home to San Diego with mud cloth cotton sample with mud on it; 3. go to Washington, D.C. to meet artisans and acquire mud sample from Mali; 4. ship mud to Nebraska for analysis; 5. send analysis to Victorville, California for interpretation; 5. send analysis to City of Industry, California for clay samples matching mud data; 6. interpretations and clay samples are sent to San Diego.

¹ The rewarding lesson itself is long and takes considerable planning and preparation. This lesson is for making a small sample, not wardrobes of clothes.

² California Visual and Performing Arts content standard 3.0 Historical and Cultural Context.



Nakounte Diarra poses with Ann Fuerst and samples of her famous *bogolanfini* art.



Diarra applies mud with a stick on fabric designed with negative and positive motifs. She works on a dried gourd instead of a flat surface.³



Founemouso Sakiliba, *Bogolan* expert, poses with Ann Fuerst with her pictorial and stenciled mud cloth works.



Bogolan Teacher and Artist Mamadiu Boundy and his studio in Segou, Mali. Two experts in “The art of Basilan and Bogolan dyeing speaking at international conferences are Mrs Néné Thiam (Mali) and Mr Kandioura Coulibaly (Mali).

Next, Fuerst had to find a source in California for the leaves used to prepare the cotton cloth. Learning that the tree in Africa that may have been used for the dye bath was a

³ To obtain a gourd visit the Welburn Gourd farm at 40635 De Luz Road, San Diego call 760-728-4271 or www.welburngourdfarm.com .

species of birch, Fuerst contacted her sister in Walnut Creek who has several birch trees in her back yard. Fuerst's sister sent branches with tiny birch leaves by priority mail and Fuerst's husband picked them off the twigs.

The purchase of the cotton cloth was next. A local yardage shop in San Diego was the source of the 100% muslin. The dyeing process followed. Now all that was needed was the mud. Fuerst also had a piece of the original cloth she worked on in Africa. She used that in her test of the clay samples, too. (*See her tests below*).

Fuerst sent the USDA data to Laguna Clay Company in Southern California for a suitable sample. The samples sent to her were tested. Alberta Slip was more successful than Black Charm in making a dark impression on the dyed American cotton cloth and the African cotton cloth. The resulting stains on the American cloth are not as dark as anything produced in Africa, but the process is more like the actual experience an African would have than painting motifs with black tempera.

Fuerst then traveled to National City to Free Form ceramics. She purchased iron oxide and magnesium oxide in hopes of increasing the darkness of the Alberta stain on the textile. The result was not impressive.

Richard at Free Form recommended Fuerst contact Atlas Chemicals for advice. Fuerst talked at length with the president who said she should look at manganese ore M_n (not magnesium) because it was a popular coloring agent with Mexican clay contractors seeking to "antique" red tile and red roof tiles.

Using stencils, Fuerst made two applications of manganese ore and Alberta slip to the cotton fabric. The results were most impressive. In examining the data of Diarra's mud and the analysis of Alberta slip, Fuerst found that M_n was the one mineral that Diarra's mud had that the Alberta Slip did not. Keep in mind, Alberta slip was designed for firing and not as a textile application.

This lesson successfully stains cotton using a mixture of Alberta Slip and Manganese. It is not identical to Diarra's mud. It does not turn black. But the design is dark. Basilan textiles in the Sahel esp. Mali use (*Anogeissus leiocarpa*, *Lannea* spp.), and Bogolan textiles in Mali use (*Anogeissus leiocarpa*, *Lannea microcarpa*, *Combretum glutinosum*, *Ficus glumosa*),

"The production of a bogolan cloth is a 4-step process. First comes the preparation of the iron-rich mud. This is done about 2–4 weeks before use. The mud is collected from the banks of certain rivers, lakes or ponds and kept in a container. It is stirred from time to time, adding a bark decoction of *Terminalia macroptera* or *Piliostigma reticulatum* (DC.) Hochst. (nyama, *Caesalpinaceae*). Then the cloth is dyed using the basilan technique, using the leaves of *Anogeissus leiocarpa* and sometimes *Lannea microcarpa* bark. To prepare the dye bath the leaves are either put in water in a large cooking pot with a small amount of baobab ash-lye added and boiled, or the leaves are just soaked in water without

heating for 2 days. The latter way is preferred in Ségou (Mali) because the result is as good and no fuel is needed. The cloth to be dyed is soaked in the bath and subsequently dried in the sun. Soaking and drying is repeated several times to obtain a deeper colour, taking care that the same side of the cloth is always exposed to the sun. The third step consists of drawing the design on the cloth with the prepared mud, using an iron tool ('binyéni') or a pen made out of a *Borassus* leaf stalk ('kala'). The black designs on the cloth are created by the iron salts⁴ present in the mud that react with the yellow or ochre-red basilan dyes rich in hydrolysable tannins. The mud can be applied several times to obtain a very deep black. Eventually the cloth is dried, cleaned and washed. The dry mud sticking to the cloth is removed by washing in a river; when water is scarce the mud is first removed by rubbing and shaking and then the cloth is washed with clean water.

After drying again, the bogolan cloth is ready.

In the bogolan technique the bark of *Lannea microcarpa* is sometimes used to obtain different colours. If a uniform orange to red-brown colour is required for the background, the whole textile can be soaked in the *Lannea* bark decoction. Mud is then applied to the cloth to decorate it with black designs. This can also be repeated several times to obtain a true black. Dyeing with *Lannea* gives reddish colours and *Anogeissus* gives yellow colours."⁵

This lesson should be an invaluable one for anyone studying the arts of Africa. Unquestionably it provides children an important insight into the design of textiles made and decorated with natural materials.

Content Standards:

Kindergarten

2.0 CREATIVE EXPRESSION

Creating, Performing, and Participating in the Visual Arts

Students apply artistic processes and skills, using a variety of media to communicate meaning and intent in original works of art.

Skills, Processes, Materials, and Tools

2.1 Use lines, shapes/forms, and colors to make patterns.

First Grade

1.0 ARTISTIC PERCEPTION

⁴ The mud used by Diarra, a famous Bogolanfini artist, was analyzed by the USDA and found to have less than 2% iron in it. As a result of this scientific analysis, Fuerst is not convinced the small amount of iron in the mud causes the deep black. But she continues her research.

⁵ Andary, C., Doumbia, B., Sauvan, N., Olivier, M. & Garcia, M., 2005. *Anogeissus leiocarpa* (DC.) Guill. & Perr. In: Jansen, P.C.M. & Cardon, D. (Editors). PROTA 3: Dyes and tannins/Colorants et tanins. [CD-Rom]. PROTA, Wageningen, Netherlands

Processing, Analyzing, and Responding to Sensory Information Through the Language and Skills Unique to the Visual Arts

Students perceive and respond to works of art, objects in nature, events, and the environment. They also use the vocabulary of the visual arts to express their observations.

Develop Perceptual Skills and Visual Arts Vocabulary

1.1 Describe and replicate repeated patterns in nature, in the environment, and in works of art.

Second Grade

3.0 HISTORICAL AND CULTURAL CONTEXT

Understanding the Historical Contributions and Cultural Dimensions of the Visual Arts

Students analyze the role and development of the visual arts in past and present cultures throughout the world, noting human diversity as it relates to the visual arts and artists.

Role and Development of the Visual Arts

3.1 Explain how artists use their work to share experiences or communicate ideas.

3.2 Recognize and use the vocabulary of art to describe art objects from various cultures and time periods.

Sixth Grade

3.0 HISTORICAL AND CULTURAL CONTEXT

Understanding the Historical Contributions and Cultural Dimensions of the Visual Arts

Students analyze the role and development of the visual arts in past and present cultures throughout the world, noting human diversity as it relates to the visual arts and artists.

Role and Development of the Visual Arts

3.1 Research and discuss the role of the visual arts in selected periods of history, using a variety of resources (both print and electronic).

3.2 View selected works of art from a culture and describe how they have changed or not changed in theme and content over a period of time.

How did Bogolanfini (rural) change to Bogalan (urban)

Eighth Grade

3.0 HISTORICAL AND CULTURAL CONTEXT

Understanding the Historical Contributions and Cultural Dimensions of the Visual Arts

Students analyze the role and development of the visual arts in past and present cultures throughout the world, noting human diversity as it relates to the visual arts and artists.

Role and Development of the Visual Arts

Diversity of the Visual Arts

3.3 Identify major works of art created by women and describe the impact of those works on society at that time.

Look at the Bogolanfini of women in Mali whose works are in Smithsonian

9th through 12th Grade

1.0 ARTISTIC PERCEPTION

Processing, Analyzing, and Responding to Sensory Information Through the Language and Skills Unique to the Visual Arts

Students perceive and respond to works of art, objects in nature, events, and the environment. They also use the vocabulary of the visual arts to express their observations.

Impact of Media Choice

1.5 Analyze the material used by a given artist and describe how its use influences the meaning of the work.

Compare the application of clay to the application of mud on birch mordant prepared fabric and fabric with no birch mordant.

historical contributions and cultural dimensions of the visual arts.⁶

Connections: Geographical understanding where cotton crops can grow in California and Africa.

Learning Objectives:

Students will be able to:

acknowledge scientific research contributes to art education and global understanding of peoples and art forms.

Identify 75% of the materials correctly that African artists use to dye cloth.

describe the process of dyeing with mud

demonstrate successfully the process of dyeing with mud

describe different ways black mud is used

staining textiles

healing (Dead sea mud)

cosmetics (Dead Sea mud)

⁶ California Visual and Performing Arts content standard 3.0 Historical and Cultural Context.



Fuerst applies black mud all over her body at the Dead Sea in Israel. This mud—a natural sediment-- sold by Dead Sea Health Products (Kibbutz Mizpe Shalem Dead Sea 90670) contains Montmollonite, Caolinite, Illite, quartz, Calcite, Feldspars, and Organic material (1.4%). The liquid ingredients (42%) contain other minerals.

apply black clay to cloth to create a design that stains and dyes the cloth

point out the differences between designs on cloth that have positive motifs and negative motifs.

name an artist known for making textiles using mud.

differentiate between fabrics that were designed with mud and those that were created with some other technique like tie-dye or batik.

Locate a source of manganese in Mali, Africa



Manganese is mined in the south east of Mali near Ansongo on the Burkina Faso and Niger borders. A close-up of the manganese and outcroppings of the mineral in Mali are pictured above.

Vocabulary:

Bogolan

Cotton fabric dyed with mud in contemporary designs. The designs are usually “positive.”

Bogolanfini

Cotton fabric dyed with mud using traditional rural and “classic” motifs. The motifs are usually “negative”.

Mud-Cloth Helper

Mud-Cloth Helper is a combination of moistened dry minerals to make a black clay-like paste. It is not a true bogolan or African mud cloth paste just like a “Hamburger Helper” meal is not made from scratch. Short cuts were taken to make this mud cloth by combining Alberta 1 clay slip and manganese ore.



Negative Design

A design that has a background applied instead of the designs themselves.

Pagnes

Wraps worn in Africa that have been dyed with mud.



Positive Design

A design that has been applied to a background.



Founemouso Sakiliba

This artist and Educator is President of the Association of Widows and Orphans in Bamako, Mali. She teaches members how to make bogolan to help them generate income. The association is known for its pictures like the one held by Ann Fuerst above. Founemouso Sakiliba was taught by Nakounte Diarra of Kolokani, Mali.⁷

⁷ 37th Annual Smithsonian Folklife Festival: Appalachia: Heritage and Harmony; Mali from Timbuktu to Washington; Scotland at the Smithsonian, June 25-july 6, 2003, Washington, D.C., Program, Washington, D.C.: Smithsonian Center for Folklife and Cultural Heritage, 2003.

Materials:



Fuerst in southern Mali cotton fields, cotton field and cotton in Kern county near Bakersfield, a weaver in Sierra Leone, bark and leaves that Diarra uses, soaked leaves in a Segou studio.

Newspapers or drop-cloths

sketch paper and pencils/crayons for design development

X-ray films and stencil knife

4 yards cotton

Alberta Slip (dry)

Manganese ore (dry)⁸

8 cups of dried green birch leaves

large pot of water

sieve

stove top or hot plate

a stiff bristled brush for each student

1 pound raw dry clay⁹ mixed like pancake batter

containers for mixed clay

water source for washing out textiles

sun source for drying textiles (patio?)

marker for identifying student textiles.

⁸ Available in 50 lb bags at Atlas Chemicals, 2929 Commercial Street, San Diego.

⁹ The identity of the clay available for public use was not confirmed at the time this lesson plan went to press August 15, 2009.

Motivation:

Museum visits, examples of fabric worn by parents or teacher, library books, classroom visitors, local crops

Procedure:



Strips covered with mud are laid out to dry in the sun; sifting the leaf fragments; spinning the cotton

What really happens: artisans harvest: leaves, bark, Baobob pods, mud, cotton (In times of drought, the harvest is poor), gather recycled materials (old toothbrushes X-ray sheets).



Baobob trees with pods. Diarra's tree bark and leaves used in the Bogolanfini technique. Anogeissus tree and leaf detail used in the basilan technique.

Processing the Harvest:

1. Birch Leaves: Pound and Pulverize, soaking for a solution, straining
2. Grape Bark: soaking for a solution, straining
3. Baobob pods: Pulverizing, soaking for a phosphorous caustic soda bleach called Sodani solution
4. Place mud in a large covered container of water and add organic material to ferment for one year.
5. Cotton: clean, spin and give to a man to weave
6. Weave the cotton in narrow strips or commercially woven cloth
7. Tailor the strips together.

8. Rinse the cloth in solution made of cengura or galaba leaves to dye it yellow (*Anogeissus tree*).
9. Dry the cloth in the sun
10. Harvest the mud and add organic material to ferment
11. Cut recycled materials to size needed such as X-ray film sheets. Sterilized old toothbrushes.
12. Apply motifs with sticks or stencil

What to do in classroom settings. Set up organizations in the classroom. The first step is for student groups to join a co-op. Bank/ cotton market information / Artists/ spinners/weavers, organize shipments of *Anogeissus leiocarpa* leaves. The **Vernacular names** N’galama, African birch (En). N’galama, bouleau d’Afrique (Fr). Make maps to show where manganese is mined. Create experimental studies with vegetable dyes and iron and manganese to get darker stains.

Students join a classroom co-op to “purchase” pesticides and fertilizers. Methods to increase the viability of the seeds of n’galama (*Anogeissus leiocarpa*) are badly needed. Many aspects of cultivation and management need to be worked out In the San Joaquin Valley, visit a place where cotton is grown or processed Learn how to grow cotton, spin cotton, and weave cotton.

or purchase 100% cotton and wash it thoroughly in hot water and dry.

1. Cut the cotton into 6” or 9” squares. Distribute markers and have children print their names on their samplers. Think of designs. Create or use stencils.
2. Harvest mud/(order and mix Alberta clay slip), Birch leaves and bark (this is where the reddish colors in cloth come from).
3. Ferment mud with organic materials like birch leaves for a year.





4. Mash and boil or soak the leaves. Collect eucalyptus bark (rich rust red pieces) in the Fall when it self-peels off the trees. Break up the pieces and boil in a different pot.

Sieve the leaves after soaking or boiling to extract liquor. Sieve the bark and discard the bark after a deep liquor is obtained.

6. Dye cotton cloth with birch liquor.

7. Dry. Iron the cloth if it is heavily wrinkled.

8. Prepare the “mud” mixture. Wear a face mask and gloves. Use utensils not intended for food. Fuerst used a proportion of 1/2 cup of dry Alberta Slip and four tablespoons of dry Manganese ore (not magnesium). Mix thoroughly in a closed container. Stir with spoon then, while still wearing a mask, add about 1/3 cup of water to make a thin paste.

Apply mud/clay designs with sticks or old toothbrushes, or stencil brushes, working it into the surface of the cloth.

9. Dry in sun until it looks dark gray and cracks.

10. Wearing gloves, wash all the mud off gently until water runs clean. Wash only one section at a time. The areas dyed by the mud will be darker.

11. Dry the cloth in the sun again.

13. Apply mud again and again, and rinse/dry after each application.

Soak the fabric in the bark liquor for a richer dyed background.



14.



15. Display and critique the samplers.



This is the result of this lesson as it appears rinsed. Not exciting, but the stain from a clay mud is there. The first image is a carefully selected American clay (Alberta Slip) on American cotton: a dark gray shape in upper right and a series of triangles horizontally below. The second image is made of mud-cloth helper with bleached negative space on the left. The third is an African cotton piece. It shows the African birch dyed cloth. There is a dark gray swatch of Alberta Slip in the lower left. In the upper right of the beige cloth, you can see a couple of "black diagonals" applied with African mud during the lesson in Segou in 2002. This is how dark our designs should be. The American clay has not been fermented, and in these photos the American clay has only been applied once.



How to make clothing for the Marionette: Mud-Cloth Helper

Materials for decorating about one square yard of cotton

Bleach pen, Clorox gel 2 oz pen will cover about 16 square inches of design.

Birch leaves (4 quarts packed)

Water

8 quart container

stove top

sun shine

strainer

newspapers

X-acto knife or similar blade

Stencil brush

X-Ray film

100% cotton yardage 3-4 yards

2 measuring cups for 1/2 cup not for food use (one for dry, one for wet)

measuring spoon for 1 Tablespoon not for food use

1/2 cup dry Alberta 1 Slip

4 Tbsp. of Manganese ore powder

3-4 Tbsp of water

plastic bag (quart-sized zip-lock style)

1 protective face dust mask

2 pair disposable latex gloves

1 small bowl not for food use

1 spoon not for food use

1. Prepare the cotton cloth. Wash it in hot water to remove all the sizing.
2. Place the birch leaves in an 8 quart container and pack until one-half full. Add water until the container is about 3/4 full. Insert the cotton fabric. Heat until the liquid comes to a boil. Cover and lower the heat until the water, leaves and fabric just simmers.
3. Simmer several hours. Let the fabric remain in the pot overnight. Lay the cloth out in the sun to dry. It is not necessary to remove the leaves and debris from the cloth. It will shake off when dry. Soaking and drying is repeated several times to obtain a deeper color, taking care that the same side of the cloth is always exposed to the sun.
4. Measure out about 1/2 cup of fresh water.
Put on the protective face dust mask. Inhaling the particles from the dry materials is hazardous. Put on the first pair of latex gloves to prevent direct contact with the dry materials.
4. Carefully open the Alberta Slip 1 bag of dry powder and measure out 1/2 cup of the dry slip. Empty the measured powder into a zip-lock style plastic bag. Close the Alberta Slip product bag and secure.
5. Open the bag of manganese ore and measure out 4 Tbsp. of the black powder into the plastic bag containing the measured Alberta Slip. Close the manganese ore product bag and secure.

6. Seal the zip lock bag securely containing the two powders to gently stir the mixture. With the protective face mask on and the gloves on, open the zip-lock bag and further stir the mixture with a spoon.
7. With the protective face mask on and the gloves on pour about 75% of the mixed powders into the bowl of water. Gently stir the raw materials into the water to make a thick black syrupy mud.
8. Cover the black “clay mud” with plastic film until ready to use.
9. Remove and dispose of the 1st set of latex gloves. Remove your dust mask, and set aside.
10. Draw your design directly on the cloth with sticks on top of a gourd like Diarra or use stencils. To make a stencil, African style, use old X-rays. Ask your dentist. Lay a copy of the desired design under the X-Ray film and cut through both.
11. Press your fingers down on the stencil to secure it to the cloth with one hand, and with the other, hold a stencil brush (some Africans use tooth brushes) to pounce the “mud” through the design.
12. Wait until the “mud” no longer looks glossy and has a matte finish, then carefully peel up the stencil off the prepared cotton. Wash the stencil off once you put your latex gloves back on.
13. Use a hair dryer, or let the “mud” dry on the cotton over night. If it is a sunny day, set the “mud” designed fabric in the sun to dry.
14. In cold water, with gloves on, gently wash off the black “mud.” Because you are using a “mud-cloth helper” recipe, the residue from the released “mud” can stain. Try not to let the dissolving mud touch uncovered parts of the cloth as you rinse. It won’t make a big dark stain like the areas you prepared, but if you can prevent the dissolving mud from touching the fabric as you rinse, you will probably be pleased.
15. If you want, repeat steps 10 through 14 to increase the darkness of the design.
16. After the final rinse, when there is no more mud residue on the fabric, dry it. Iron it. This makes it easier to apply the bleach.



17. Use a Bleach pen to lighten the negative areas of the design. Notice how the sleeve in the photo above--which was not treated with the bleach gel--still retains the color of the birch-leaf-dyed un-bleached cotton cloth. Follow the directions on the pen, then rinse the bleach from the cloth before it becomes damaged. You’ll see it lighten before your eyes! I did not find that the bleach had any affect on the “mud” stained areas.

18. After you rinse the cloth thoroughly, you are ready to tailor your mud cloth. Small mud-cloth sections might be used in collages. Pictured above is a cloth collage mural with “marker” designs from a San Francisco City School District. Each cloth piece seems to have singed edges. The cloth pieces have been sewn one to the other by the students to create the larger mural. Consider weaving together strips of the mud cloth or making hand puppets with mud cloth accessories, or even hair scrunchies and cell phone pouches for seasonal gifts.

The marionette pictured here was made from Laguna Clay Company’s air-dried clay. It is about 16" tall. The head was made by fashioning two pinch pots together. The first day the face was made. On the second day the back of the head was made. The wire loops were placed in the soft clay at the top of the head and the front and back of the neck. I placed the head face down in a cup (like a massage table) so it could dry inside and outside at the same time. I took several days to make the hands and feet.

When all the sections were dry, I dipped the pieces into a gallon of neutral (color you see) latex paint and strung the pieces on a wire by their loops to let them all drip dry over newspaper. And drip they did. After a day, the paint dried. I wore latex gloves so I could smooth the wet paint over any areas that were missed.

To finish the head I used a silky fake fur fabric for hair. I covered the head with white glue where I wanted hair. I cut a tiny slot in the center of the fabric to allow the head loop through. Then I laid the square of fabric on the wet glue and trimmed the “hair”. Sometimes I had to cut vertically from the lower neck to the top of the skull to remove excess folds of the hair fabric. Everything seemed to secure nicely.

The facial details were painted with acrylic paints and a small brush. Highlights of white were added to the eyes and lip “gloss”. The finger nails and toe nails got an acrylic polish, too.

To quickly assemble the figure, I used pieces of copper wire. A large shoulder chest pad was sewn out of plain fabric to fill out the top of the body and to make the clothing hang better. It snaps on the back.



Mud Cloth Background

Symbolic images on fabric: Repetitive or Pictorial

Dark or Light / Negative or Positive (designs may be spray painted).



Wall hangings

Art Works (Artists including Ismael Diabate)

Man's long tunic

Diviner's garment bordered decorated with rows of cowrie shells

Hunter's garment

Man's two piece pants and tunic

Pillow Slips

Fashion accessories

Interior Design

Toys (Marionette costume)

Performer's costumes and accessories



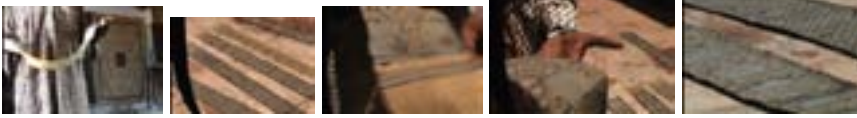
Designs on hunters' clothing are difficult to discern because they have been worn so much for power-giving and protection qualities.



Repetitive design STENCIL PROCESS

1. Find X-ray sheets for stencil and squeegee or brushes
2. Create or layout stencil design

3. Cut out the stencil designs
4. Position the stencils on the fabric
5. Generously apply the mud through the stencil pattern with squeegee or brushes
6. Remove the stencil and place the mud stenciled cloth in the sun to dry.



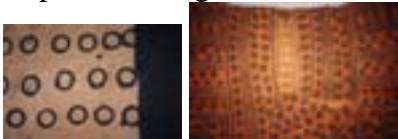
7. Apply mud again
8. Dry in the sun
9. Rinse off the dried mud
10. Soak decorated fabric again in solution of boiled leaves.
11. Apply a caustic soda bleach called sodani bleach to lighten the exposed yellowed areas to make them white again.
12. Set the bleached area in the sun.
13. Rinse out the dried bleach

Repetitive design PAINTING PROCESS after TAILORING

(e.g., Diarra's work)

1. Generously apply the mud with wooden sticks or small broad edged iron tools made by blacksmiths.
2. Place cloth in the sun to dry. Rinse
3. Apply mud again. Rinse
4. Dry in the sun
5. Rinse off the dried mud
6. Apply "bleach" to lighten areas
7. Set the bleached area in the sun.
8. Rinse out the dried bleach

Repetitive design STAMPING/PRINTING PROCESS before TAILORING



Repetitive design PAINTING PROCESS before TAILORING

Draw design on fabric with sticks

Fill in the design



Diarra applies a positive design on tailored cloth. See the seam stitches in the first image next to the point of tool.

Repetitive design STENCILING PROCESS before TAILORING (see above)

RECYCLE bogolan fabric and dye it
Decorate with cowrie shells or bells



Interior Design
Dan Rivers Fabrics, Hallmark bags

Assessment:

Can students:

acknowledge scientific research contributes to art education and global understanding of peoples and art forms.

Identify 75% of the materials correctly that African artists use to dye mud cloth.

describe the process of dyeing with mud

demonstrate successfully the process of dyeing with mud

apply clay to cloth to create a design that stains and dyes the cloth

point out the differences between designs on cloth that have positive motifs and negative motifs.

name a artist known for making textiles using mud.

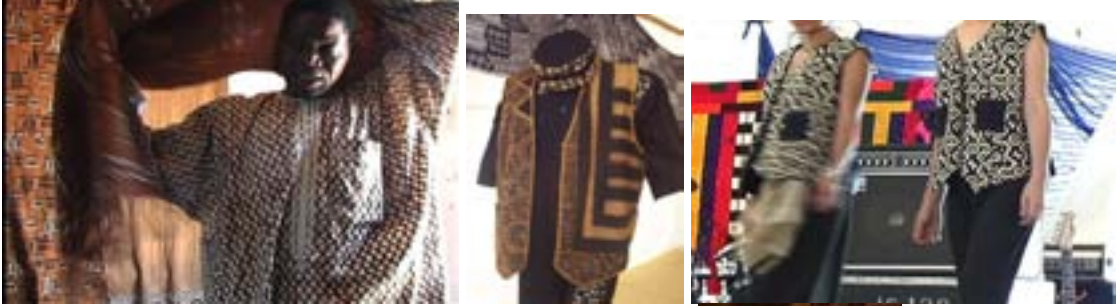
differentiate between fabrics that were designed with mud and those that were created with some other technique like tie-dye or batik.

Extensions:

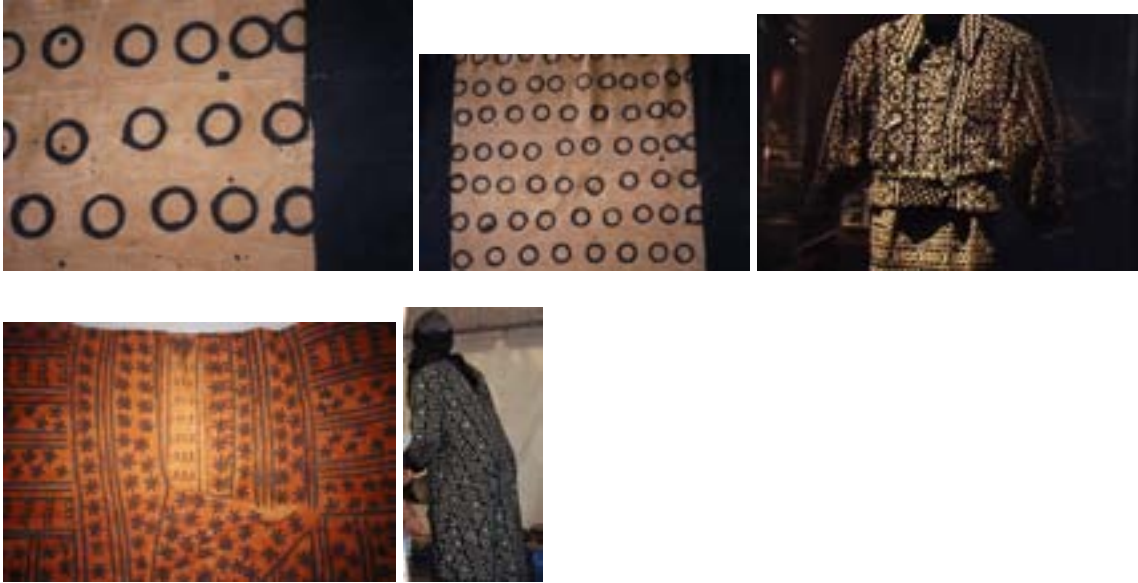
Plan a fashion Show

Make hand puppets or marionettes to wear pieces from samplers.

Organize entertainment in which performers appear wearing bogolan: a marionette show, a dance performance, a music event



Kasobone Design Group, Bamako fashions; Yaya Coulibaly, puppeteer, Bamako's bogolan hyena



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