

A HANDBOOK FOR WEAVING
AND TEXTILE DESIGN FOR GRADES
EIGHT AND NINE

A THESIS
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
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INTRODUCTION

STATEMENT OF THE PROBLEM

The proposed problem for study was the development of a manual in the area of fibers and textile design for grades eight and nine art students.

PURPOSE OF THE STUDY

The writer's purpose was to provide a resource guide for teaching fibers and textile design suitable for students in grades eight and nine within the guidelines of national and regional professional agencies.

JUSTIFICATION

The national and State of Texas' curriculum guidelines for the secondary level craft courses provide only a general outline of content for an effective art program. There is an obvious deficit for a course of study to teach the specific techniques of fiber and textile design as proposed in this handbook.

BACKGROUND

During the writer's twelve years as a junior high art teacher, it has become increasingly obvious that there is little information available in this area of fiber and textile design.

Curriculum guides at all levels provide minimal information. Art teachers are fortunate if they took one college level course in crafts and /or weaving.

The researcher has long enjoyed an interest and appreciation for fibers and textile design and feels a manual with information for this course of study would definitely aid the beginning and the established art teacher. It is felt that a greater clarification of the definition of "crafts" is necessary to this study. According to the report written by the Task Force of specialists for the National Art Education Association, "crafts" is defined as:

Like the word "creativity", "crafts" is subject to various interpretations, and therefore communicating becomes difficult without definition. Art history texts may treat painting, sculpture, and architecture separately, and lump other arts into a "minor Arts" section. Sculpture studios sometimes are categorized as belonging within a craft domain with courses in weaving, jewelry, and ceramics.

The variation in interpretations comes from the emphasis on physical control and the theoretical separation of fine and functional products.

. . . . Emerson in his 1841 essays asked that the distinction between fine and useful arts be forgotten. In the Bauhaus and public school art influenced by this school, the union of arts and crafts became a reality. Commercial interests have capitalized on the openness of the art product concepts and offer a dazzling variety of materials. . . .¹

¹ Art Education: Senior High School, The National Art Education Association, 1972, p. 17.

The course of study within this handbook presents a sequential set of appropriate art experiences in fibers and textile design which will give the student confidence in his technical ability and make him aware that his own ideas are valid and expressive.

DELIMITATIONS

The following delimitations were proposed for this study:

1. The purpose of this study was to determine the feasibility for the development of a resource guide for a basic fiber and textile design course that could be incorporated into an existing art program.
2. The researcher has followed the guidelines stated by national and regional accreditation agencies.
3. This study was limited to eighth and ninth grade art students.
4. This manual was aimed at the junior high school student taking art for the first time.
5. This handbook was particularly intended as an educational aid for art teachers with a limited fiber and textile design background.
6. This guide includes exercises and projects to give the beginning art student an understanding of the basic techniques and methods of weaving, batik, stitchery, rug hooking, and related activities.

METHODOLOGY

1. The researcher has reviewed a number of books and periodicals related to fibers and textile design projects, techniques, and history.
2. The researcher has written and developed a handbook in compliance with guidelines suggested in publications of national, regional, and professional agencies.
3. The writer has gathered relevant information on fiber and textile design techniques and has developed projects which will relate in growth from eighth and ninth grade.
4. The researcher has used examples of art work by former art students, demonstrations of different techniques, and showed and discussed art work done by the researcher.
5. The writer has reviewed films, filmstrips, and slides which could be used in this course.
6. The researcher has compiled a source list of suppliers, supplies, visual aids and any other materials relevant to the course of study.

DEFINITIONS OF TERMS

Content: All that is contained or expressed in a writing.

(Webster's New World Dictionary, p. 318)

Crafts: An occupation or trade requiring manual, technical dexterity or artistic skill. (Webster's New World Dictionary, p. 343)

Create: To bring about: Cause, Make, Produce, Design.

(Webster's New World Dictionary, p. 345)

Demonstrations: An explanation by example, experiment, etc.; practical showing of how something works or is used. (Webster's New World Dictionary , 391)

Develop: To bring into activity, as an idea. (Webster's New World Dictionary , p. 401)

Fibers: Any substance that can be separated into threads or threadlike structures for weaving. (Webster's New World Dictionary , p. 538)

Growth: A growing or developing; specifically origin and development. (Webster's New World Dictionary, p. 641)

Guideline: A statement of general policy. (Webster's New World Dictionary, p. 317)

Handbook: A small book of facts or useful information

usually about a particular subject. (Webster's Student Dictionary, p. 380)

Junior High School: A school intermediate between elementary school and senior high school; it usually has the seventh, eighth and ninth grades. (Webster's New World Dictionary, p. 794)

Manual: A book capable of being conveniently handled.

(Webster's Student Dictionary, p. 519)

Resource: Something that lies ready for use or can be drawn upon for aid; supply of something to take care of a need. (Webster's New World Dictionary, p. 240)

Technique: Any method of working with materials. (Art In Your World, p. 279)

Textiles: A woven or knit cloth. (Webster's Student Dictionary, p. 918)

Texture: An element of design that refers to the surface quality as being rough, smooth, soft, etc. It can be implied or actual. (Art In Your World, p. 279)

Weaving: Interlacing of threads or fibers known as warp with other threads or fibers known as weft to create a design in cloth. (Art for Today's Schools, p. 261)

THE WRITER'S BACKGROUND

The author of this handbook has been an art teacher for twelve years. Her first job was working with television art in elementary schools in Columbus, Ohio. After a year with this grade level, the writer requested transfer to junior high school where she has remained. During this time period, she married, had a child and moved to Texas where she is currently teaching junior high art.

Educationally, the writer graduated from the Penn State University with a Bachelor of Science degree in Art Education. She obtained sixteen graduate hours at the Ohio State University majoring in Art Education. While meeting Texas certification requirements for teaching, she also took additional fine arts courses at the University of Texas at Arlington. In 1979 she entered the Texas Woman's University to receive a master's degree in Art Education. After taking one weaving course she transferred her degree plan to a weaving major.

Having had a strong background in design from Penn State and being interested in bold color and texture, weaving satisfied certain artistic requirements of the writer. Weaving and textile design has changed greatly in recent years within the public schools. Unfortunately,

many school systems have not kept up with the latest methods in their curriculum guides. Students enjoy exploring this subject area.

The writer uses strong contrasts in her art work and interesting textures. She has also taken an interest in designing and printing fabric for clothing which she makes. On the following pages are some of her wallhangings and textile designs.



Wallhangings of
assorted yarns
and plastic
tubing.



Wallhanging of
hooking, quilt-
ing, machine
stitchery and
fabrics.



Space warp hanging with assorted yarns.



Hooked rug of cotton rug yarn. Leather straps are attached with velcro.



Hoop weaving of
assorted yarns
and dyed jute.



Hooked rug made
of cotton rug
yarn.

new dye hanging
with terracotta
and still waxy.



Hooked rug of
cotton rug yarn.



Inko dye hanging
with trapunto
and stitchery.

Assorted tops,
valley stitchery,
quilted and
assorted silk-
finished ap-
ples.

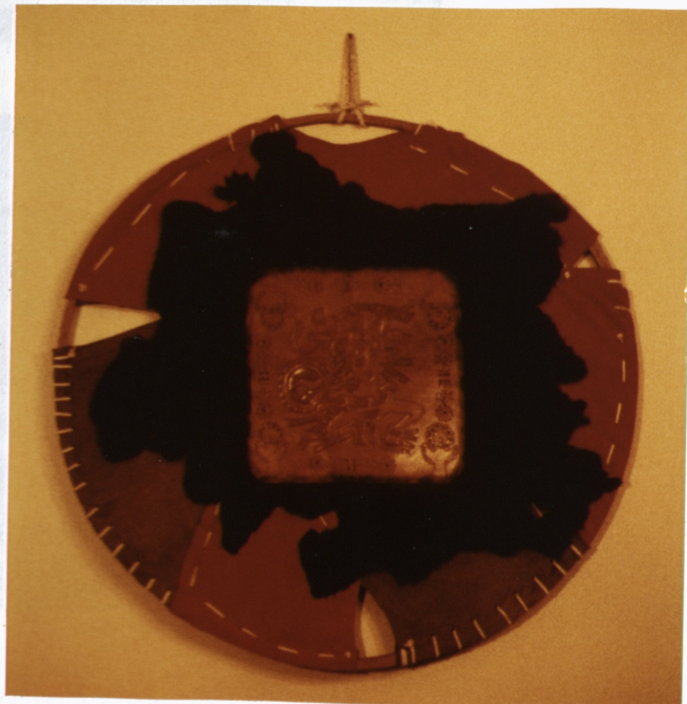


Assorted tops
using stitchery,
quilting and
assorted silk-
screened fab-
rics.

Space warp hanging using assorted yarns.



Hoop weaving with suede, rabbit fur and tooled leather.





Hoop weaving
with wools
and chenille.



Slit and Tab
hanging of
wool.

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I. STITCHERY

A. OBJECTIVES:

1. To develop the student's response to shape, color and texture through visual and tactile manipulation of flat pieces of fabric with the interaction of string and yarn.
2. To instruct the student in the basic techniques of applique, quilting, stuffing, (trapunto), and the use of embellishments.
3. To develop the student's skill in mastering the basic stitches.

B. MATERIALS:

1. Burlap
 - a. Cut approximately a 14" x 16" piece per student.
2. Assorted needles:
 - a. Crewel-Fine
 - b. Chenille
 - c. Tapestry-Medium
 - d. Darning-Large
3. An assortment of colored threads.
4. Scissors which are sharp and pointed.
5. So-Bo fabric glue.
6. An assortment of yarns:

- a. Knitting yarns
- b. Cotton Rug yarn
- c. Twine
- d. Wool roving
- e. Synthetics
- f. Jute
- 7. Straight pins
- 8. Assorted pieces of fabric:
 - a. Pellon
 - b. Felt squares
 - c. Remnant pieces
- 9. Tailor's chalk
- 10. Embroidery hoops or wooden frames to fit the burlap.

C.. Embellishments:

- 1. Sequins
- 2. Wooden and ceramic beads
- 3. Feathers
- 4. Leather scraps
- 5. Dried weeds and flowers
- 6. Metallic threads
- 7. Assorted trims
- 8. Buttons
- 9. Pieces of fur and ribbons

Note: It should be obvious from the materials and embellishments lists that most of the supplies can come

from the student's home thereby greatly cutting down costs of the project.

D. PRELIMINARY PLANNING:

Select four or five different colors of burlap. Using your scissors, pull a thread along your cutting line so it will be straight when cut. You may want to vary the lengths and widths of the burlap pieces. Your needles, tailor's chalk and other necessities can be purchased at the local fabric shop. Assorted yarns can be bought at arts and crafts shops, knitting stores and weaver supply establishments. There are businesses and factories in many communities which will donate supplies when contacted. Students tend to bring in an array of supplies once their imaginations are stimulated.

E. TECHNIQUES:

1. STITCHERY:

- a) The teacher should demonstrate basic stitches to the students. Refer to Illustration #1. Allow students to practice stitches before beginning a project.
- b) It is recommended to refer to this technique as " stitchery " rather than

" embroidery ". Boys tend to become negative to certain terminology.

2. APPLIQUE:

- a) This is the surface treatment of attaching materials to the fabric. These scrap pieces of cloth or felt can be sewn or glued down. An enlarged paper pattern of the project would be handy for positioning and size relationships.
- b) It would be a good idea to figure out appliqued areas in advance before stitching. Combine applique and stitchery techniques together. Applique helps to fill in large areas of color and surface decoration.

3. STUFFING:

- a) When a student wants a particular area to appear more three-dimensional to the surface, it can be stuffed. Sew down three sides of the material and stuff with old nylons, pieces of cotton, polyester fiberfill or other scrap fabric. Refer to Illustration # 2. Sew the remainder of the fabric down.
- b) Trapunto:
This is another popular stuffing technique. The material is stitched down to the surface all the way around. Using a sharp scissors,

turn the fabric over and cut through the main piece of cloth. A piece of quilting or stuffing can be inserted into this opening from behind. Re-sew the backing and from the front this area will appear more raised than the rest of the surface. Angles and more intricate surface molding can be achieved with this technique. See Illustration # 2.

F. EXERCISES:

1. Wallhangings:

- a) Allow each student to select a piece of burlap and look through the boxes of trims and yarns.

According to Nik Krivetsky's theory:

Textile readiness through handling the materials can, by means of a series of developmental experiences lead to a high degree of involvement and the production of a wide range of the most experimental and advanced contemporary designs.¹

Sensitive handling and observation of materials may stimulate certain students. A subject matter discussion can help others.

(1) SUBJECT MATTER:

- (a) Nature: landscape, natural forms, seasons, times of the day.

¹Nik Krevitsky. Stitchery. An Art Horizons Book. (New York: Van Nostrand-Reinhold Co., 1967), p. 25.

- (b) Holidays
 - (c) Hobbies
 - (d) Pets
 - (e) History
 - (f) Favorite things: Foods, movies,
music groups, books.
 - (g) Vacations
 - (h) Art movements: Impressionists,
Pop Art, Op Art, Surrealists,
Abstract Expressionists, Super
Realists.
- b) Students should be encouraged to make four or five sketches for their wallhangings. After a discussion with the instructor, one of the drawings may be enlarged to fit the burlap.
- c) Before students work directly on the burlap, it is advised that the burlap be machine stitched within $\frac{1}{2}$ " of the edges with a straight or zig-zag stitch. Masking tape may also be wrapped around the edge to prevent fraying.
- d) The enlarged drawing should be cut into large sections, pinned to the corresponding area of the burlap and outlined with tailor's chalk.

- e) Refer to the various techniques and encourage as much creativity as possible.

2. Stitchery on denim:

- a) Embroidery floss, applique, stuffing, trapunto, rhinestones, jewel-tone studs, copper rivets, brass/silver studs, insignias, medals, and other assorted paraphernalia.
- b) The idea should be drawn out in advance and drawn to size. The idea can then be sketched on to the denim with a pencil or tailor's chalk. An embroidery hoop would help to keep the fabric taut. Suggest combining stitchery with the assorted materials as stated above.

3. Soft Sculpture:

- a) Background:

Soft sculpture is a combination of fabric collage and quilting techniques.

Dona Z. Meilach has an interesting approach:

1. The artist conceives a design and then appliques different materials to one another. In this method he may work much like the collage artist but he usually sews the piece of cloth rather than gluing them.

2. The artist uses a piece of predesigned fabric and works padded forms into the design. The fabric may be a commercially

printed pattern, or it may be one the artist has designed himself by batik, silk-screen, block printing, and so forth.²

Soft sculptures can be very abstract or represent known objects. One of the first soft-sculpture artists was Claes Oldenberg. His first pieces (1968-1969) were greatly influenced by Pop Art: hamburgers, strawberry sundaes, bananas and other assorted foods were constructed in canvas and vinyls. He stuffed his armatures with kapok and foam. These sculptures were very gaudy, slick and shiny and extremely controversial.

Other soft art sculptors are Alma Lesch and Marilyn Pappas. (While attending the Penn State University, the writer had Marilyn Pappas as one of her instructors. There was no hint at that time that Marilyn was even interested in fabric sculpture. Perhaps her interest was stimulated when she went to teach in Florida.) They left their sculpture with raw edges, long hanging

²Dona Z. Meilach. Soft Sculpture (New York: Crown Publishers, Inc., 1974.), p. 31.

threads, bunched and stuffed areas. Lee Brontecou constructed wire and metal armatures and stretched canvas around it.

b) Materials:

An assortment of new and old materials as: old pillow stuffing, builders insulation materials, feathers, dacron batting, old nylons, styrofoam, interfacing (pellon) for stiffening. Select color-fast cloth when possible. Dyed fabric has a tendency to fade. If dyed fabric is used, try to avoid direct sunlight on the project.

c) Patterns:

Enlarge paper patterns to true size of the finished project. Allow five-eighths of an inch for seam allowance. You may want to construct the project in paper to see how well it fits before cutting the fabric.

d) Armatures:

Certain projects may need armatures made of wood, metal or additional padding for reinforcement. You do not have to attach the armatured sculptures to the wall. They can be hung from the ceiling or set in the middle of the floor.

4. Reverse-Applique (Molas)

This technique is multi-layered fabric cut through layers and sewn back exposing the colored layers underneath.

a) Mola History:

Molas are associated with the Cuna Indians of the San Blas Islands located off the Atlantic coast of Panama. This technique was a highly developed form of folk art with subject matter of fauna, sports, animal forms, legends, everyday life activities and myths.

With the arrival of the missionaries, the Indians were forced to dress more modestly. The brightly colored molas were sewn together to make a blouse. The motifs began changing to cartoons, coke bottles and other Westernized symbols as Mickey Mouse and Donald Duck.

b) Materials:

Medium-weight fabrics. Use either intense colors or pastels. One layer of printed fabric may be used. You also need thread, needles, scissors, fabric glue, tailor's chalk or a pencil.

c) Technique:

(1) Cut all fabrics to the same size and

- (2) Hold layers together with long basting stitches along the edges.
- (3) With tailor's chalk or pencil draw the desired pattern on the top layer.
- (4) Cut through the various layers with a sharp-pointed scissors until you reach the desired color.
- (5) With thread and needle, turn the layers of fabric under and do a small blind stitch. See Illustration # 3.
- (6) Save the cut-out pieces and applique to the surface layer of the mola. Decorative stitchery can also be added.
- (7) Before starting the project, students may want to work out the patterns in full color with crayons or paint. Cut construction paper is also interesting.
- (8) For finishing touches, ribbon may be added for the edges. Students may want to keep their own individual molas or combine them into class wallhangings.

II. MACRAME:

A. OBJECTIVE:

1. To develop the student's response to shape, linear value and textural possibilities through the visual and tactile manipulation of yarns, twine and ropes.
2. To develop hand-eye co-ordination in creating positive and negative creative openings and patterns through macrame.
3. To realize the purposefulness of the macrame in purely utilitarian ways.
4. To develop the student's skill in mastering the basic macrame knots.

B. MATERIALS:

Assorted natural and synthetic cords and yarns, twines, raffia, jute, hemp, ribbon, sisal, leather, novelty yarns and cellophane.

C. ACCENT MATERIALS:

Feathers, shells, wooden and ceramic beads, strips of burlap and cloth, dried flowers and weeds, ribbon, cut brass, copper or aluminum, cut pieces of leather.

D. HOLDING MOUNTS:

Hangers, a cyclone fence, holding cords, card-

board with slits cut into the top, driftwood, wooden dowels, tree branches, hoops, animal bones, wheels, working tools as horse bits, singletrees and yokes, shaped wire and wood with holes drilled, ceramic shapes, plexiglass and bamboo. See Illustration # 4.

Note: Many of the materials may be found within the student's home or in nature itself. Students should be encouraged to look within their environments for supplies and ideas for their projects.

E. PRELIMINARY PLANNING:

1. Students must first learn the basic knots. See Illustration # 5. Each student can make a simple corrugated cardboard holding mount approximately 9" x 12". Mount a holding cord and Lark's Head four- one yard cords onto it.
2. Demonstrate the Lark's Head, Square Knot and Half Knot to the students. Hand out sheets demonstrating all the anticipated knots for mastery.
3. Additional knots may be the Horizontal and Diagonal Double Half Hitch, Square Knot Button. Square Knot Picot, Butterfly,

Alternating Square Knots, Wrapping Knot.

See Illustration # 6.

4. Since it is necessary for the student to be able to master knot tying, the teacher may require a simple test of four knots taken from the hand-out. Students may look at the sheets while taking the test. The test will be less threatening if the sheets are allowed. Students should pass the test before beginning the project.

F. BACKGROUND:

Knot tying has become so much a part of people's lives that few think about tying a knot. Sarita R. Rainey gives a good synopsis:

The origin of knotting and looping goes back a long way. Primitive people used knots for both utilitarian and decorative purposes: to fasten materials to houses and boats; to trap, harness, and train animals; to make jewelry; to represent letters, to embellish clothing, wallhangings and tapestries; and to make fringes.³

Various professions require special knots such as: climbing, fishing, sailing, surgery, building and being a housewife. Special ceremonial knots have been part of

³Sarita R. Rainey. Fiber Expressions
(Davis Publications, Worcester, Mass., 1979), p. 1.

various cultures for thousands of years - such as the Chinese and the Egyptians.

The ancient Peruvians perfected a know tying system called "Quipu" knots. Vertical cords tied to a two foot cord were knotted to represent messages. The closer the knot to the holding cord, the more important the message. The cords were colored: gold was a yellow cord, red for war or danger and green for grain. Quipu knots also represented a decimal system for keeping track of necessities such as gold, corn, grain and the population. The lower knots were the one's, next row up the ten's and so on similar to the Chinese abacus.

The Reef or Hercules Knot was used by Greek doctors to heal wounds quickly. The Scandanavian "Canute" knot meaning "to knot" was used as a method of birth control. Hopefully a last born son was named Canute and would "tie the knot" but so far it remains unproven.

Fearful sailors sailing from Arabia purchased "wind knots" from the Arabian witches. These knots supposedly contained

the wind to blow ships back to the shore. Unfortunately, there is no evidence to support the actual powers of the above knots.⁴

G. EXERCISE # 1-MACRAME FREE CHOICE:

"Why free choice?" Many students have predefined ideas for their projects. This also helps to prevent the monotony of many similar projects. Suggestions of macrame activities might be: plant hangers, hanging shelves, lamps, hanging tables, wallhangings, owls, clothing or jewelry. There are many excellent macrame books available in local arts and crafts stores for under two dollars each.

The students may find an illustration of a project that he or she might want to make. The recommended materials and necessary supplies would be listed. These books should not be used as "crutches" but as motivational books for creative thought. Encourage the students to use the book as a "springboard" for their own ideas.

⁴ Joan Fisher. The Art of Macrame (The Canary Islands: The Hamlyn Publishing Co., 1972), pp. 6-11.

Encourage students to change the pattern, use their imagination and decorate their projects.

H. EXERCISE # 2- MACRAME FROM SCRATCH:

Note: The writer feels it is the responsibility of the teacher to teach the basic knots to the student. Since macrame supplies are expensive per student, it is felt the purchase of the supplies is up to the student.

1. For students not wishing to be influenced by macrame books, suggest the purchase of a five or ten pound ball of jute. Let the student determine the thickness of the jute. Students may want one of the other materials referred to in this chapter.
2. The cords need to be cut to seven times the intended overall length.
3. Require the use of at least four knots.
4. Suggested excercises are the same as Exercise # 1.

I. EXERCISE # 3-ADVANCED MACRAME:

For the student who feels more advanced and requires more of a challenge, Sarita R.

Rainey suggests more interesting texture

achieved through patterns:

1. Alternating rows of square knots.
2. Even rows of square knots.
3. Square knot sinnets criss-crossed.
4. Square knot sinnets woven over and under each other.
5. Tight-knot sinnets in contrast to loose-knot sinnets.
6. Half-hitches in vertical, horizontal, diagonal and curved lines.

She also suggests making more use of space as the cords representing the positive patterns as opposed to the open areas which can create creative spacing:

1. Knots of different kinds are combined.
2. Knots are made in alternating or even rows.
3. Threads are grouped as solid areas, single sinnets, tied, wrapped, woven or fringed.
4. Cords and threads of different weights and sizes are combined.
5. Threads are pulled in different directions to create open spaces.
6. Materials unrelated to cords—bamboo or metal cylinders, wood or plastic shapes are⁵ combined to create new spaces.

For Exercise # 3, a project more suitable for mastering might be a wallhanging. There should be a greater variance of materials, accent embellishments and interesting hanging mounts.

⁵ Rainey, Fiber Expressions, pp. 6-7.

III. RUG HOOKING:

A. OBJECTIVES:

1. To develop the skills of pattern and design adaptation in creative rug hooking.
2. To create interesting depth and tactile sensations through length of loop and an assortment of yarns.
3. To teach the basic technique of rug hooking and finishing details.

B. MATERIALS:

1. Wooden stretcher bars or wooden frame.
2. Burlap
3. Staple gun or hammer and tacks.
4. Punch needle
5. Medium and heavy weight yarns (found at Tandy crafts, K-mart, arts and crafts shops and stitchery supply stores)
6. Strips of cloth
7. Inexpensive cotton fabric for backing.
8. Leather strips
9. Latex sizing, Rug Back glue (Tandy crafts) or $\frac{1}{2}$ water and $\frac{1}{2}$ Elmer's glue to hold loops in place.

C. TECHNIQUE:

1. Have students draw at least five color

ideas for their rugs. They may use any subject matter as long as it can be reduced to a basic design. Limit the colors to six if possible. Small areas of color can be costly.

2. Students need to determine the size of the finished project. 3' x 3' or 3' x 4' are recommended sizes.
3. When purchasing yarns, consider a skein of cotton rug yarn will easily cover a nine inch square. Purchase yarn accordingly. Keep all sales receipts since most stores will take back un-used yarn. To roll a skein: un-tie one end, lay the open skein around the back of a chair and wind it into a ball.
4. If using stretcher bars, make sure all corners are attached at a 90 degree angle. Insert the wooden pegs and glue in place.
5. The burlap should be a neutral color or dark color. Stitch along the edge with a sewing machine using a straight or zig-zag stitch. Attach the burlap to the frame with a staple gun or tacks. Staple from the centers and work out to the sides.

Try to keep the center taut.

6. Turn the burlaped frame to the back.
(wood side up). Use a magic marker or tailor's chalk and draw straight lines next to the frame. This will be the outside edge of your rug. Continue to draw an enlarged version of your design on the burlap.
7. In hooking a rug, you work from the front to the back. Thread the needle (see Illustration # 7), poke the needle through the burlap, do not allow it to jerk as you pull it carefully and a loop is formed. Do not pull the needle out all the way or you will pull out the loop. Work the needle in even rows, working in the same direction all over the rug. Read the directions for your rug needle and practice before starting the project.
8. Gluing: Remove the rug from the frame and lay it flat on the floor covered with newspapers. Select one of the following:
 - a) Use the Rug Back glue purchased from Tandy crafts. Spread over the back with a brush and allow to dry. Drying time is twenty-four hours. The glue may feel tacky yet it's dry.

- b) Apply Latex sizing the same way.
- c) Or, you can choose to mix $\frac{1}{2}$ water and $\frac{1}{2}$ glue (Elmer's). This method can be used but it is messy and can stain through the back to the front of the rug.

- 9. After the glue has dried, cover the back with a dark cotton fabric. Turn the cotton under along the looped border. Stitch in place with the blindstitch.
- 10. Hanging: Purchase a wooden or metal rod from a local store. Buy matching accessories and rings. Space the rings evenly along the top of the rug. Clamp or sew the rings in place.

Note: Due to the amount of time spent on making the rug, and the amount of money spent, it is recommended that the rug be displayed on the wall and not on the floor.

D. EXERCISES FOR RUGS:

- 1. Frames of wood covered with burlap should not be smaller than 12" x 18". An assortment of hooking, stitchery and applique can be combined. The individual student's creativity is very important in this project.

For this project, the burlap can be left on the frame for display. Depending on the amount of involvement, the student can change the length of the loops, use strips of cloth and leather as accents.

Note: Due to costs, the student can be asked to furnish the frame and particular yarn colors. The school could provide the remainder if the budget allows.

IV. TIE-DYE:

- A. Tie-dye is the process of tying, folding, wrapping or similar technique of preventing dye to permeate an area of fabric thereby creating an interesting design and color contrast between the white fabric and the dye.⁶

HISTORY:

Evidence shows that tie-dye dates back to ancient Asia, spread to India, Malaysia and across to Africa. Ceremonial robes were found in the tombs belonging to the T'ang Dynasty. The various regions have their own distinctive designs and colors. This uniqueness allows us to chart the origins and dates when these tie-dyed pieces were made.

B. OBJECTIVES:

1. To develop an artistic sense of design through controlled and accidental tie-dye.
2. To attempt experimentation with color dye combinations. (Refer to Illustration # 8.)
3. To combine stitchery and other surface embellishments for added decoration.

⁶ Meilach. Contemporary Batik and Tie-Dye, pp. 179-268.

C. TECHNIQUES:

1. Marbelizing
2. Twisting
3. Spotting
4. Circular shapes
5. Gathering
6. Pleating

Refer to Illustration # 9 for further information on the above.

Suggestion for marbelizing: Tie in objects such as rocks, marbles, corks, rubber washers, etc. Use string, rubber bands, thread and rope for tying.

7. Tritik: This is the method of sewing through one or more layers of fabric. By pulling tight on the thread, you create pleats and folds. These pulled patterns can be controlled or abstract.
8. Bleach-out: Burlap and man-made fabrics can be dyed with bleach. Using layers of newspaper on a flat surface underneath the fabric, apply full strength with an old brush, squeeze bottle or by dipping. Many times fabric has been re-dyed by the manufacturer. When bleaching occurs, other

colors are revealed underneath the surface color. Be sure to wear old clothes and use rubber gloves. After drying, hang the fabric so light can be seen through the subtle variations of the bleached out fabric.

Note: Not all fabrics will respond well to bleaching. Test a small sample of the cloth before buying in quantity. Avoid getting bleach in eyes or direct contact with your skin.

D. MATERIALS:

1. 100% white cotton or muslin
2. Cold water dyes
3. Vats or buckets with sticks or wooden spoons to stir
4. Thread and needle
5. Scissors
6. An iron
7. Any necessary supplies from the Technique Section

E. PROCEDURE:

1. Wash the cloth to remove the sizing.
2. Plan the design. Review the various

techniques.

3. Prepare the fabric according to the selected technique. Tie, fold, stitch, or clamp the fabric.
4. Dye the fabric to full strength of desired color. Rinse the dyed fabric in clear water until dye stops running.
5. Re-tie and re-dye fabric for subsequent colors.
6. When tie-dyeing is completed, untie the layers and iron the cloth between layers of newspaper until the color is set.

Use a cotton or linen setting on the iron.

F. SURFACE DECORATION TECHNIQUES:

1. Decorative stitchery and surface embellishments.
2. Quilting.

G. EXERCISES-DECORATIVE CLOTHING:

Have students cut simple patterns. Bring patterns from home. One-size fits all patterns would be handy. Suggest vests, shirts, skirts, scarfs and other types of casual clothing.

H. EXERCISES-TIE-DYE JEWELRY:

Cut paper patterns. Quilting would help maintain the shape. Attach surface embellishments

and decorative stitchery. Refer to Illustration # 10.

I. EXERCISES-WALLHANGINGS:

1. Sew together tie-dye squares of fabric made by various students. You may want to quilt these for added body. Add strips of fabric and ribbon as trim.
2. Combine dyed pieces with other patches treated with other techniques: stitchery, batik, rug hooking, etc. The wallhangings can be a certain subject matter or totally abstract.

V. PRINTMAKING:

A. OBJECTIVES:

1. To challenge the student's imagination with an assortment of printmaking techniques used alone or in combinations.
2. For students to work with the reverse image and solve technical problems within the processes.
3. To acquaint art students with the following processes: linoleum prints, silk-screens, and eraser prints.

B. ERASER PRINTS:

1. MATERIALS:

- a) Soft gum erasers (rectangular shaped)
- b) Scissors
- c) A pencil
- d) An x-acto knife
- e) Water based inks or oil based inks.
Oil based require turpentine for clean-up.
- f) Burlap or cotton cloth

2. PRELIMINARY PLANNING:

- a) Be sure each student has a gum eraser, pencil and x-acto knife (if possible).
- b) Cut assorted sizes of paper for practice.

- c) Cut cotton or burlap into assorted sizes, 12" x 12" being the smallest.
- d) Provide newspaper, paper towels and turpentine if necessary.

3. TECHNIQUE:

- a) Have students draw simple, large patterns on all sides of the eraser and ends with a pencil.
- b) With a sharp pencil or an x-acto knife, carve out the patterns leaving six designs on the eraser. Note: Be gentle with the carving since the eraser crumbles easily.
- c) Apply ink to one side of the eraser with your finger tip or a paint brush. (The student may want to practice on paper before using cloth.) Carefully press the inked pattern onto the cloth. By turning the eraser in different directions and using all the patterns and assorted inks, the designs will vary greatly. Allow students to exchange erasers and explore the medium.

4. EXERCISE I-ERASER PRINTS:

After students have experimented on paper with eraser prints, print on assorted sizes of burlap. Encourage movement in different directions and changing colored inks. Use water based inks for this project. Clean-up with water.

For final displaying of this project, stitch the class burlap pieces together on a larger piece of contrasting burlap. Sew with a zig-zag stitch around all pieces. The class project can be displayed on a banner.

5. EXERCISE II- UTILITARIAN FUNCTIONS:

Print on cotton cloth with oil based inks. This technique can be used for printing lengths of fabric for table cloths, napkins, clothing, drapes or use your imagination. The completed project must be heat set.

Heat Setting: Place the printed fabric after it is dry between layers of newspaper. Drying time can vary because of the humidity. Using a hot iron (cotton or linen setting) iron the fabric until no ink is removed from the fabric. Change news-

papers frequently. The fabric is now dry cleanable.

A quilted backing can be added to the back of the cloth and an interesting pattern can be machine or hand stitched through all layers. Quilted pieces can be used on the tables, clothing or wallhangings.

C. LINOLEUM PRINTS:

1. MATERIALS:

- a) Battleship linoleum
- b) Water or oil based inks (turpentine)
- c) Linoleum cutting tools
- d) x-acto knives
- e) Corrugated cardboard
- f) Magic markers and pencils
- g) Assorted types of paper and 100% cotton cloth (washed)

2. PRELIMINARY PLANNING:

- a) Decide on the project.
- b) Stress simplicity of design. The image will be printed in reverse (opposite direction). Beware of words, letters, numbers, etc.
- c) Some linoleum can be purchased mounted on a wooden backing. This type is more

expensive and is usually only in small sizes. (3" x 4"). The alternative is to locate a local distributor of battle-ship linoleum and buy large pieces (6' x 12'). Cut the large pieces with an x-acto knife on the floor. Watch cutting the floor underneath. This method affords more varied sizes for the students.

- d) If the student wants to use more than one color for printing, cut a piece of corrugated cardboard to the same size as the linoleum. From one piece of cardboard, cut the pieces and glue to other cardboard. Use cardboard boxes cut to size.

3. TECHNIQUE:

- a) Enlarge the pattern to fit the piece of linoleum and cardboard.
- b) Transfer the design with carbon paper to all pieces.
- c) Reduce the color scheme to three or four colors. The linoleum should print half of the color. The cardboard will print in the remaining negative areas.
- d) After tracing the pattern on to the

linoleum, color the area for printing with a magic marker. Any marker color will do.

- e) Repeat tracing the pattern on to the remaining cardboard. For the linoleum, cut the unmarked areas with linoleum cutting tools. Always cut away from the body. Keep your hands free behind the tool. Tools can be sharpened with a whet stone treated with motor oil.
- f) Cut out the cardboard colors with x-acto knives always cutting away from your free hand.
- g) When printing, determine the colors of paper and fabric for printing. Limit students to 5 to 8 prints. Allow a 2" border around the printed area.
- h) Printing: Apply ink to a piece of plastic, glass or the counter top (in a well used classroom.) Roll the brayer through the ink and roll over the cardboard. Place the inked cardboard down on to the center of the paper or fabric. Lightly mark the area with a pencil. This will provide proper placement of any subsequent colors .

Turn the cardboard and paper over carefully.

Using a wooden spoon, press the ink on to the paper by carefully rubbing the back of the printed piece. See Illustration # 11.

Each day print only one color. Allow a drying period. Staple the prints by the corner on to a cleared bulletin board or hang on a clothesline or use a drying rack. When printing the second color, etc., use the registration pencil marks. This takes a lot of the guess work out of print-making. After two days of printing with cardboard (two colors), print your linoleum (third color).

- i) Clean-up: For water based inks, use water with sponges and paper towels for cleaning. Sponge clean the linoleum. Wipe excess ink off the cardboard. Do not wet the cardboard. For all oil based inks use turpentine. You will also notice that the oil based inks leave a shiny surface on the paper. The water based inks leave a very matte finish to the printed surface.
- j) Recommendations for fabric printing:
Use oil based inks or fabric inks or dyes when using cloth. Heat set the fabric as in

eraser prints. The fabric is now dry cleanable for wearing.

4. EXERCISE I-A BANNER:

Cut out the linoleum as described above. Each student prints on a uniform size of cotton.

After printing is completed, these pieces may be quilted or sewn together as they are. Possibly sew a ribbon around each print and sew a co-ordinating border around the entire project.

5. EXERCISE II- CLOTHING:

Cut linoleum as described above. Have students select a simple pattern vest, skirt or shirt or similar article of clothing. Decide if an over all design is needed or only a center piece panel. Several students may want to use their prints together as one pattern.

D. SILK SCREEN:

1. BACKGROUND:

In modern silk screen printing a stencil bearing the design to be reproduced is adhered to or formed upon a screen of silk. The stencil blocks up (closes up) the meshes of silk in some areas, leaving other areas open. When ink is drawn across the screen with a squeegee it is forced through the open areas of the stencil and deposited onto the printing surface to form a facsimile of the original design. This printing process is generally known as the Silk Screen Process because silk was the original cloth used in the screen.

Due to the current costs of silk it is no longer affordable for classroom use. There are excellent polyester films available in shops selling fine art supplies. Speedball products seem to be reasonably priced for the screens and inks.

Since 1900 people have used the current method of silk screening. In 1907 the first patent was issued in England. Eventually it was patented in San Francisco in 1915. Today silk screening is a thriving industry all over the world. It is seen on clothing, posters, furniture, wallpapers, etc.

2. MATERIALS:

- a) A prepared screen with polyester fabric.
- b) Fabric inks (Naz-Dar dyes or Speedball fabric inks) Turpentine for all oil based inks.
- c) Crayons
- d) LePage's Glue
- e) Brown craft tape
- f) A squeegee
- g) 100% cotton cloth or T-shirts for printing.

3. PRELIMINARY PLANNING:

- a) Students need to plan a design with three or four colors.

- b) Prepare the silk screens: Use new fabric for each screen that has several colors in the fabric. Attach the screen with tacks or the Speedball method (instructions with the screen).
- c) Use brown craft tape at least one inch in on the inside and the outside of the screen. Cover all exposed wood.
- d) The approved design should be enlarged to fit the open fabric of the screen.
- e) Use a flat surface area, have plenty of newspaper, turpentine and rags available.

4. TECHNIQUE:

- a) Prepare the color pattern to fit the open area of the screen.
- b) Determine the first color for printing. Lay the picture under the screen. Using sharp pointed crayons, color the first color on the inside of the screen.
- c) In a baby food jar mix 3 parts DePage's glue to 1 part water. Cut thin pieces of cardboard into 1" x 2" strips. Tilt the screen and pour a small amount of this liquid on the screen. Reapply the glue if necessary. For tiny open areas, apply Scotch

tape to the back of the screen.

- d) After the glue is dry, use a clean cloth with turpentine on it to remove the crayon. Work from the inside of the screen. This opens up areas of the screen for printing.
- e) When ready for printing, be sure the fabric will always be printed within the same area. Mark the board underneath with pencil marks or taped cardboard pieces to keep the registration consistent. If your silk screen has hinges, this helps for proper registration.
- f) Lay the fabric within the marked area under the screen. Lower the screen. With a spoon or popsicle stick stir the ink and spread it over the taped area of the inside of the screen. Pull the squeegee and ink down over the screen. Repeat this one more time if necessary. Put the squeegee down and lift the screen. The fabric should print where desired.
- g) Print as many prints as desired. Hang these prints up to dry. Do not re-print until the previous color is dry.
- h) Take the screen, squeegee and spoon to the sink and clean thoroughly with water. If an oil based ink is used, first clean with

turpentine then clean the glue out of the screen with water. For subsequent colors, repeat the above process per color. Allow fabric to dry between screenings.

- i) Heat set the colors once the full picture is screened.

5. EXERCISE I-SILK SCREEN:

Silk screen t-shirts as a fundraiser or allow students to make their own t-shirt patterns.

6. EXERCISE II-SILK SCREEN:

- Print designs on light weight fabrics as gauze and let the students make kites. Use dowel rods and string bought at a hobby shop. Use a paper kite for the pattern.

7. EXERCISE III-SILK SCREEN:

Silk screen fabric for clothing: vests, shirts, skirts or jewelry. Have students prepare their own patterns. Allow five-eighths of an inch for seam allowance.

8. EXERCISE IV-SILK SCREEN:

Print a large wallhanging made up of all the student's silk screens. Refer to the Linoleum Printing Section.

9. ADDITIONAL IDEAS FOR PRINTMAKING:

- a) Tear pieces of paper and lay them under the

silk screen on top of the fabric. Use the paper to block the ink. Print in this way with water based inks. This method can give an interesting abstract pattern.

- b) Use regular stencil paper , or salvage the stencil paper from the school office and cut a stencil with an x-acto knife. Paper can be laid in a cardboard box with the sides cut down to a two inch heighth. Lay the stencil on the paper and use the squeegee for printing , or use a stencil brush (purchased at a hobby shop).
- c) Experiment with combining eraser prints, linoleum printing and silk screening together for some interesting results. You might want to include some potato or carrot printing for accent areas of your pattern.

VI. INKO DYES:

A. BACKGROUND:

Inko dyes are a very enjoyable process which challenges the student's ability to design in color. Inko dyes can be purchased from:
Inko Screen Process Supplies Manufacturing Co.,
1199 East 12th Street
Oakland, California 94606

When received, these dyes are packaged as a liquid in brown plastic bottles. They are water soluble for easy cleaning. When painted with a brush on the fabric, they appear to be light and extremely thin of color. However, when exposed to direct sunlight, there is a chemical reaction and very vivid colors develop before your eyes. Teachers and students are very intrigued by this process. Fortunately, the Inko people have written a very comprehensive book covering all their products and is free upon request.

B. MATERIALS:

1. An assortment of Inko dyes
2. 100% cotton cloth
3. Assorted paint brushes
4. A water container and paper towels

5. Newspaper

6. The Sun

Note: Students have done this project in the Winter as long as the Sun is present.

C. ADVANCED PREPARATION:

1. Have students prepare several ideas which are colorful using markers, crayons or paints.
2. Cut the fabric to size and allow a 2" border.
3. Spread the working area with newspaper.
4. Have water containers and brushes ready.
5. Students can work indoors and take their work out to dry or try a shaded area to work in outdoors.

D. TECHNIQUE:

1. Have final color idea approved.
2. Clear a working area indoors or outdoors.
3. Have water containers and brushes ready.
4. Place newspaper under the work area.
5. Paint the dye directly onto the cloth.
Wash out the brushes thoroughly before re-use. The dyes will run and give a watercolor effect. Colors can be mixed as yellow painted over orange to produce a gold.

Students should know the color wheel.

See Illustration # 12.

6. Upon completion of the painting, allow the fabric to dry thoroughly. Stones or bricks should be used to hold down the cloth.

E. EXERCISE I-INKO DYES:

Have the students make a wallhanging for the classroom. Piece together individual patterns or do all work on one large mural.

F. EXERCISE II-INKO DYES:

Make a wallhanging and to further enhance it incorporate the batik method, quilting, stitchery and surface embellishments.

G. EXERCISE III-INKO DYES:

Design a pattern for clothing, a toy or jewelry. Make a pattern out of paper and allow a seam allowance.

H. FINISHING TOUCHES FOR INKO TREATED FABRICS:

As in all dye treated fabric, heat set the dyed cloth. Dry clean the cloth if it is intended for clothing.

VII. WEAVING:

A. BACKGROUND:

Weaving appears to be a natural skill to evolve with Man. Originally he probably wove a few strands together with his fingers. Eventually he experimented- lifted a few warp strands, introduced the weft, and discovered an ability to weave intricate patterns. Through further experimentation with the weft, he developed more sophistication in design.

The first weaving materials were probably hairs from animals to make clothing. Animal skins were used as insulation on the floors of crude shelters. Plant fibers were used to make the homes and were also woven into hammocks. Clothing was not only insulation but probably a show of power demonstrating great skill in hunting. Eventually, other types of materials served a more practical use for woven clothing.

Twining is an old weaving technique where rushes along a river were twined together to catch fish. This twining technique is still used in current day fishing nets.

Basketry, another ancient technique, is traced back to prehistoric times. The woven reeds were packed with clay which was dried. This blocked any holes in the basket. Today this same method is still used in Africa.

It was thought that the first loom was fibers stretched between two stakes in the ground. Cloth was woven for tents and floor coverings. There are still parts of the world where this type of shelter is still used today.

The Old Testament mentions three types of weavers: the weavers of plain weaves, the weavers of multicolor materials and the "art weavers" who embroidered figures on fabrics for clothing and curtains.

The ancient Egyptians apparently mastered intricate dying techniques. Mummies wrapped in these cloths have been found and intricate tapestries are known to exist. Archaeologists have found a remarkable similarity between the weavings of the ancient Egyptians and Peruvians.

In North America the Pueblo Indians wove with cotton. The weaving technique event-

ually declined but was revived by the Navajos who wove in wool. Today the Navajo rugs are considered great works of art. The weaver creates her own patterns. When asked the meaning of the symbols you may not be told. The rug is elevated to a spiritual or "good luck" status. You would be fortunate to own a wool Navajo rug.

David B. Van Dommelen, Professor of Art Education at Penn State University wrote an interesting article on weaving. Allow the writer to share this:

Learning about design is a constant struggle for the artist and the beginning student or craftsperson. Good design does not come easily. It is important for the teacher to establish an environment within the classroom or studio which presents an opportunity for the learning student to experiment and begin to establish design and craftsmanship standards... The teacher can introduce historical culture backgrounds, set up the constraints of the process, oversee certain creative steps in making a weaving through the process and the materials, and in general set the stage for learning. After that, the student must have the inspiration and motivation to climb ahead, and through self-discovery find the answers to his and her creative needs.⁸

There are many different ways to weave which do not necessarily entail having a large

⁸ David B. Van Dommelen. On Weaving: Past to Present to Idea. (School Arts, Volume 79, No. 3, Nov. 1979), p. 29.

floor loom within the classroom.

B. VARIOUS LOOMS:

1. Cardboard Loom: Use corrugated cardboard (boxes). These cardboard looms can be in any size or shape. You cut notches evenly spaced along the top and the bottom of the cardboard. There should be a notch directly opposite each notch. Tie a large knot in one end of the warp (yarn attached to the loom) and wrap the warp around the loom through the opposite notch moving over once each time. See Illustration # 13.

This method can be used for circular handbags, woven jewelry, clothing, and any other article requiring an odd shaped loom.

2. Stretcher frame looms: Wooden looms can be made of picture frames, any scrap pieces of soft wood or stretcher bars purchased at an art shop. Attach the corners so they are sturdy. With a saw cut notches in the top and the bottom or evenly hammer nails in these areas. For notched looms warp as for cardboard. For nailed looms wrap the warp around

the nail. See Illustration # 14.

A tree branch can also be woven upon. The woven form can be left on the branch for eventual hanging. See Illustration # 14.

3. Burlap weaving: Burlap can be cut into assorted pieces. Students can draw the threads through the burlap creating open, loose and more interesting patterns. See Illustration # 14.
4. Other types of looms:
 - a) Weave on chicken wire.
 - b) Weave on pot holder looms. Many students seem to have these kits at home.
5. Hoop weaving: There are an assortment of hoops available. The simplest is the bamboo hoop which is pre-drilled with holes at regular intervals around the hoop. Tie the warp around one opening and continue the warp through the additional openings with the warp threaded through a large eyed needle.

An oak or metal hoop can first be wrapped with a cord all around the hoop.

Refer to the Macrame Section. Or, instead of wrapping, the student can Lark's Head a cord around the hoop. This method leaves a small loop in the center of each knot that will allow a needle to be forced through it and you can now warp the hoop. See Illustration # 15.

C. WEAVING MATERIALS:

Cellophane, nylon hose, string, yarn, thick and thin wool (or polyester, nylon, or cotton), tissue paper, sea shells, twine, pipe cleaners, mylar strips, ribbon, bamboo strips, bark, strips of fabric, feathers, etc.

VIII. BATIK

A. OBJECTIVES:

1. For students to work with an uncontrollable medium in order to create imaginative results.
2. To explore techniques of working with wax in a clear state and mixed with color.
3. To experiment with batik techniques of wax with cold water dyes, wax with inko dyes and melted wax crayons.

B. HISTORY OF BATIK:

Batik is a method of working with melted wax and colored dyes on cotton fabric. Many people associate batiks with the continent of Asia. Dona Z. Meilach has written a very comprehensive book on batik called Contemporary Batik and Tie-Dye.⁹ Her theory is that the batik method spread across Asia to Malaysia. Today many specialty stores feature clothing and household goods which are batiked in India.

Java and Bali became most highly

⁹ Meilach. Contemporary Batik and Tie-Dye,
p. 9.

accomplished in this process. In the thirteenth century batik was a pastime for fine ladies. Motifs and colors were characteristic of certain important families. These batiks were hand painted. Through the centuries as trade and export developed, Oriental batiks made their way to England. Eventually, after considerable experimentation, the patterns and techniques of the Oriental batiks were mechanized. Today most batiks are mass produced.

C. BATIK INSPIRATIONS:

Working with hot wax and dyes is within itself an inspiration. Students unfamiliar with this method need more stimulation. The following are some subject matter which might help:

1. Geometric shapes
2. Primitive artifacts
3. Nature studies
4. Haikus and other forms of poetry

D. BATIK TECHNIQUES-WAX AND DYE:

1. MATERIALS:

- a) White candles or paraffin and beeswax
- b) 100% white cotton (washed)

- c) Assorted tjanting tools
- d) A heating element for melting wax like a deep fat fryer or electric skillet
- e) An iron
- f) Newspaper
- g) Rubber gloves
- h) Several cold water dyes
- i) Metal or plastic buckets

2. TECHNIQUE:

- a) Have a design approved by the teacher.
- b) Cut the fabric to size and allow a two inch border.
- c) In the melting container, combine paraffin and beeswax to a 50/50 ratio. More paraffin causes a more crackling effect.
- d) The tjanting tool comes in an assortment of sizes. Dip the tjanting tool into melted wax and drip over the cloth. The wax can be controlled to an extent and should be practiced in advance. Be sure to use several layers of newspaper under the cotton material. You can also use several different sized

brushes. Do not use good brushes since they will be ruined for further use.

- e) Prepare buckets of cold water dyes.

The parts of the cloth not covered with wax will absorb the dyes, the remainder will resist it. Follow all directions on the dye package. A brand called Hi-Dye which is a permanent dye can be found in local arts and crafts stores. Powder Rit Dye or liquid dyes can be found in grocery or drug stores. Have rubber gloves and stirring sticks (wooden spoons or sticks) available. Allow the cloth to remain in the dye until the proper color strength is achieved. Remove from the bucket when the dyed color is reached and rinse until the water runs clear. Hang the cloth up to dry.

- f) Reapply the wax to areas of the cloth to remain in the first dye color. This area will now resist the next dye color.

- g) Prepare a new dye color and follow directions in # e of this section.

You will notice that the unprotected

parts of the cotton will blend into new color combinations much like a water color painting. Continue the re-waxing and re-dying until the full color is achieved.

- h) After the final drying, place the cotton between layers of newspaper. Place the iron on a cotton or linen setting. Iron the cotton between the layers of newspaper. The wax melts quickly so keep changing out the newspaper. Continue this procedure until all wax is removed. If the cloth is intended for clothing or use as drapes or on other fabrics be sure to have it dry cleaned.

E. BATIK TECHNIQUE-WAX AND INKO DYE:

1. Apply wax as in above process.
2. Inko dye is spread with various sized brushes. Be sure that the brushes and water containers are kept clean. Refer to the Inko Dye Section of this handbook for further information on the Inko Dye Process.
3. MATERIALS:
 - a) Assorted Inko dyes
 - b) Brushes and water containers
 - c) Newspaper
 - d) 100% white cotton cloth (wash to remove

sizing)

- e) Paraffin and beeswax with melting container
- f) An iron
- g) The Sun

Note: This method is much simpler than the cold water dye method. Also, it can be done outside. The early Fall or Spring is a good time to try this process. Be sure there is plenty of Sun.

F. BATIK TECHNIQUE:

1. MATERIALS:

- a) Lots of broken crayons (store old broken crayons in a box during the year).
- b) Use a wax melter which can be purchased in some art shops or national distributors. Check catalogues of large art merchandizers. Another method is to use a hot plate with a water filled pan. Within this pan of water is also a muffin pan containing the crayons. As the water boils, the crayons begin to melt. Use Q-tips to apply the crayon to the cotton cloth. Add paraffin or beeswax to the melting crayon.
- c) 100% white cotton cloth (wash first)
- d) Newspaper and paper towels
- e) Cold water dyes and needed supplies for

this process. Refer to previous sections.

2. TECHNIQUE:

- a) Melt the crayons. Refer to Materials Section for various ways.
- b) Draw the pattern on the white cotton with a pencil. Lay several layers of newspaper under the cloth before applying the crayon.
- c) Apply the melted crayon to the cloth with a Q-tip and spread over the cloth. Hold a paper towel under the Q-tip as you carry it across the cloth to avoid dripping.
- d) After all the melted wax has been applied, crinkle up the cloth and place in the dye bath.
- e) Leave the fabric in the dye bath for at least thirty minutes. When the color strength is achieved, rinse the cloth in cold water until the water runs clear.

G. PROJECTS-EXERCISE I-WALLHANGINGS:

Students may design their own wallhangings or make a class project. Stitch together the batiked pieces and bind with seam tape or ribbon. You may also add trapunto, stitchery and quilting to the surface.

H. PROJECTS-EXERCISE II-CLOTHING:

An overall pattern can be created or an

individual pattern can be designed. Be sure to dry clean the fabric. You may want to try a simple pattern as the Macedonian Shirt Pattern. See Illustration # 16.

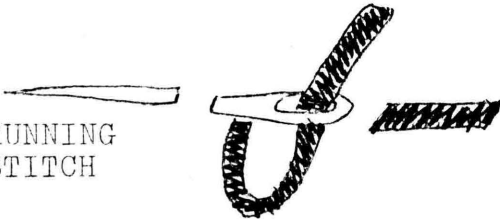
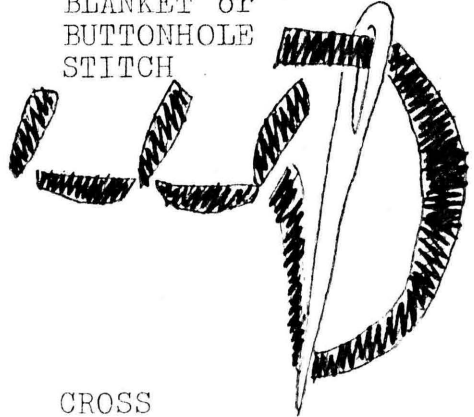
I. PROJECTS-EXERCISE III-SOFT SCULPTURE:

Design a paper pattern in advance. Know your color scheme and over-all appearance of the intended sculpture. Prepare your fabric. Certain parts may be pieced together. Stitch together the completed work by hand or machine. Remember to add extra surface decoration if applicable.

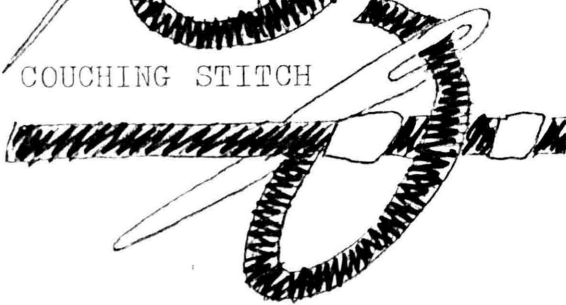
J. FINISHING TOUCHES FOR BATIK:

1. Hand and/or machine stitch.
2. Quilting.
3. Addition of felt and other fabrics with applique.
4. Cutting apart and reassembling the batiked material as a patchwork quilt.
5. Add embellishments as ribbons, beads, etc.

ILLUSTRATION I-BASIC STITCHES

RUNNING
STITCHBLANKET or
BUTTONHOLE
STITCHSATIN
STITCHCROSS
STITCH

COUCHING STITCH



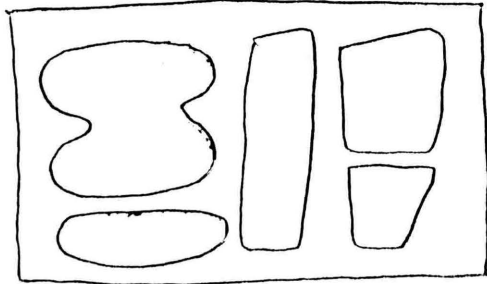
CHAIN STITCH

FEATHER
STITCH

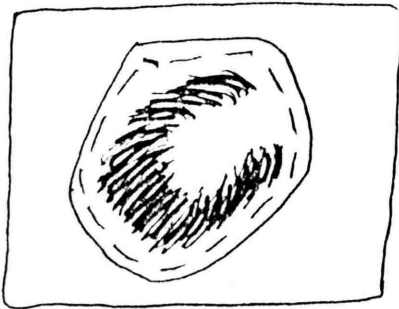
BACK or OUTLINE STITCH



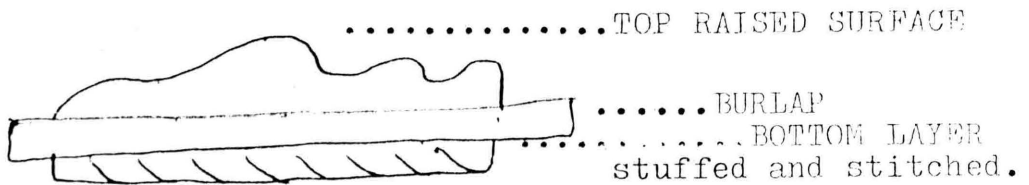
ILLUSTRATION II-STUFFING AND TRAPUNTO



APPLIQUE: Glued or
sewn down shapes.



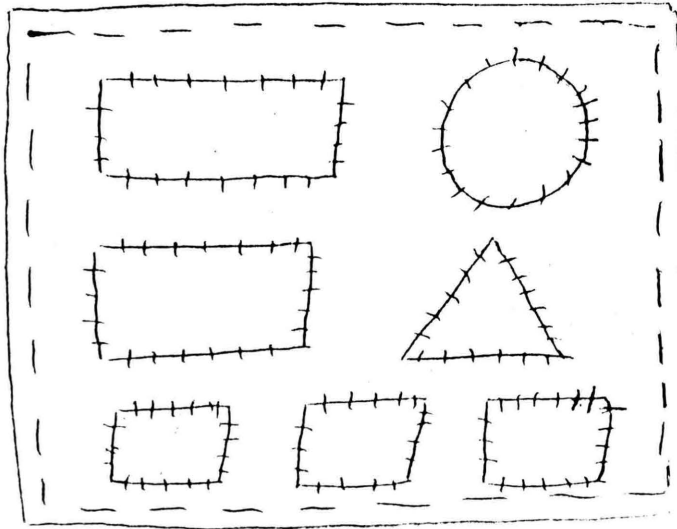
STUFFING: Glued or stitched
down pieces stuffed with
nylons, cotton or poly-
ester batting.



- TRAPUNTO:
1. Stitch down top layer to burlap.
 2. Cut through bottom of burlap-
stuff- re-stitch from behind.

ILLUSTRATION III-MOLAS (REVERSE-APPLIQUE)

MOLAS-REVERSE APPLIQUE

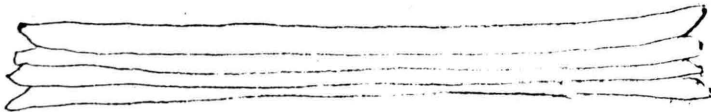


BLINDSTITCH

The cut out
area. Fold
under.

Use the
RUNNING
STITCH to
hold together
layers of
fabric.

SIDE-VIEW of layers of fabric in a mola.



APPLIQUE and STITCHERY can be added to the
surface of the mola for added decoration.

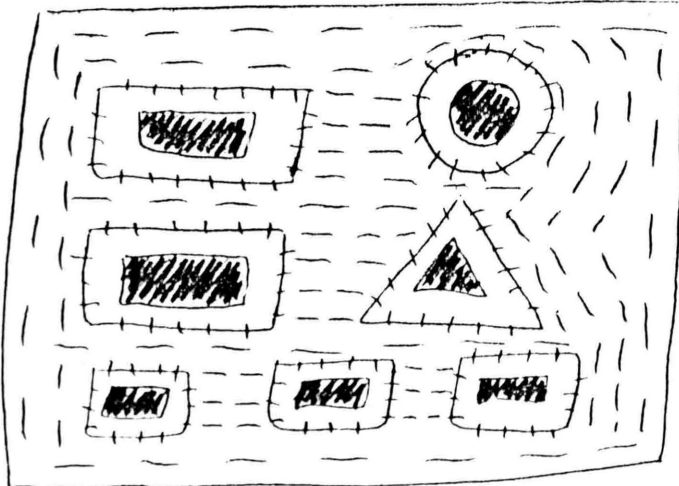
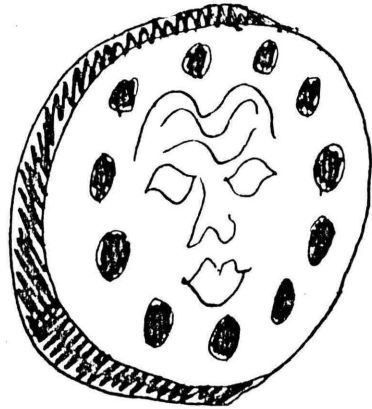
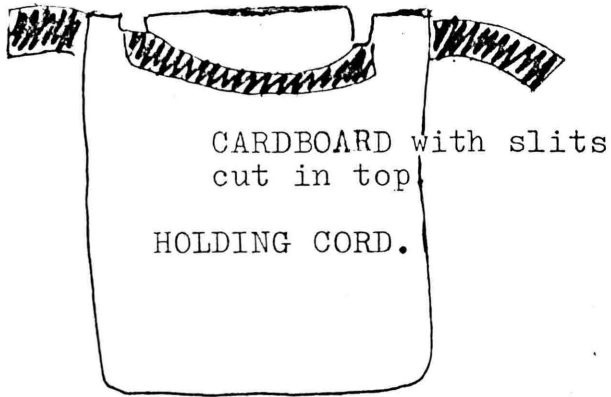
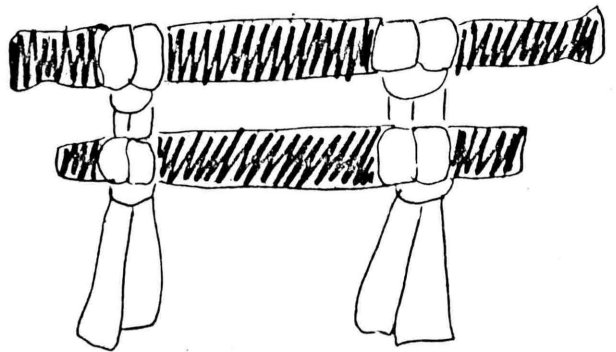
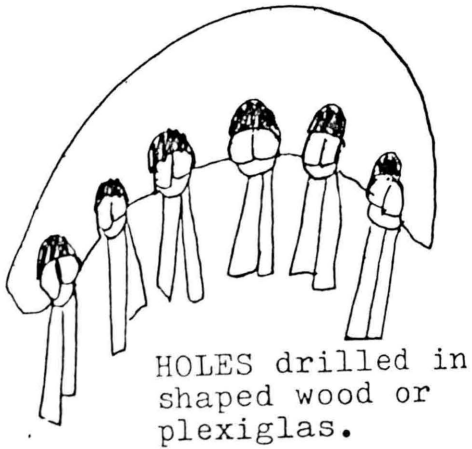


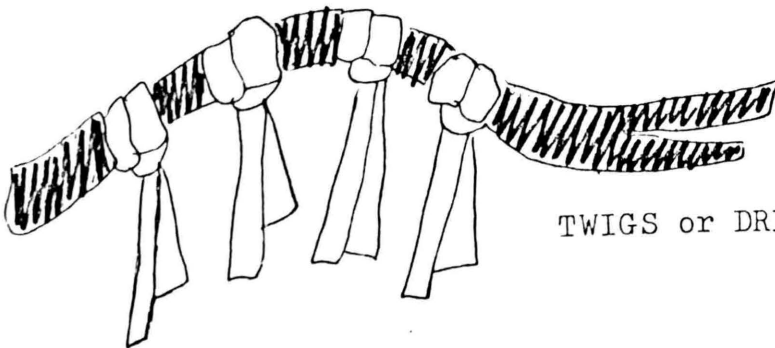
ILLUSTRATION IV- ARMATURES and
HOLDING MOUNTS for MACRAME



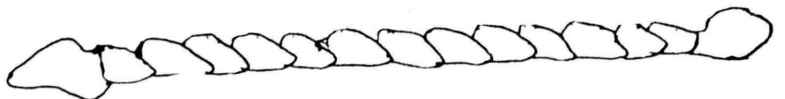
CERAMIC SHAPE formed
with holes.



BAMBOO or WOODEN RODS.

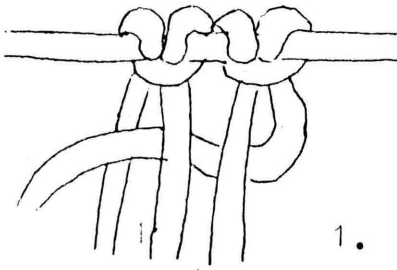


TWIGS or DRIFTWOOD.

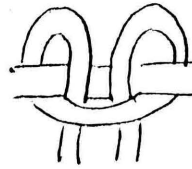
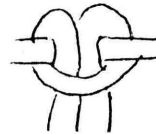


DECORATIVE DOWEL RODS.

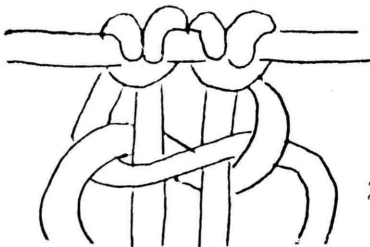
ILLUSTRATION V-BASIC MACRAME KNOTS



1.

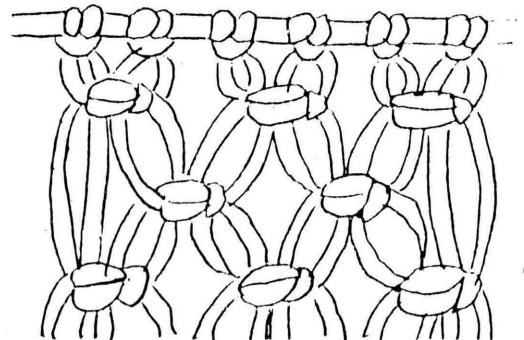
LARK'S
HEAD KNOT

ALTERNATING SQUARE KNOTS

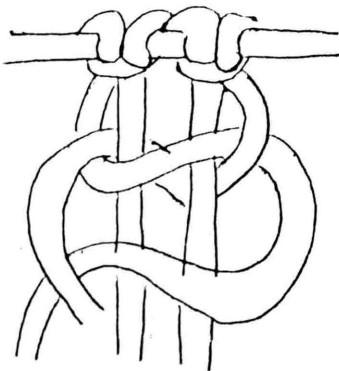


2.

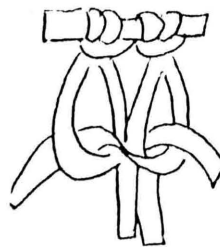
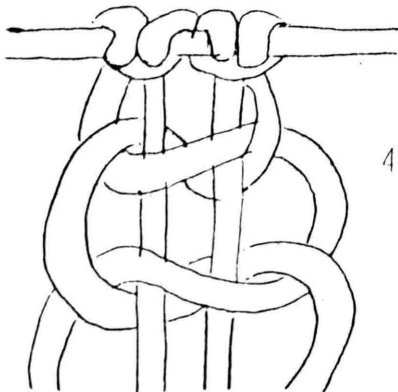
HALF KNOT



HALF KNOT to the RIGHT



3.

HALF KNOT to
the LEFT

4.

SQUARE KNOT

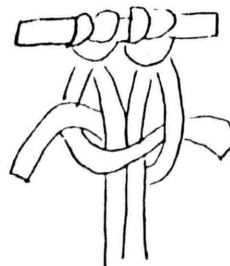
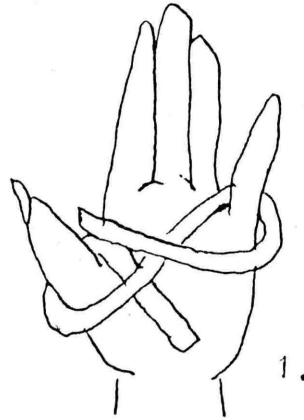
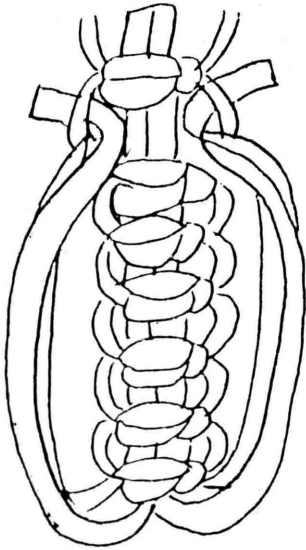
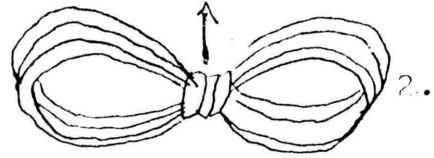


ILLUSTRATION VI-ADVANCED MACRAME KNOTS

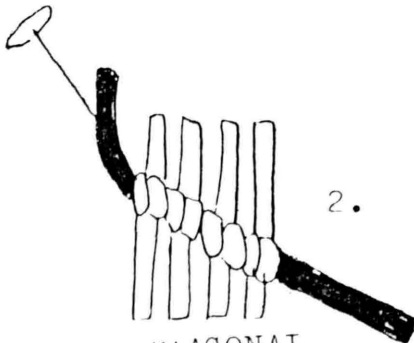
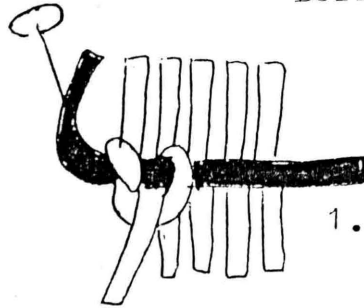
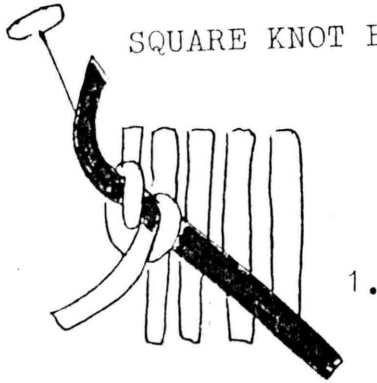


RUBBER BAND

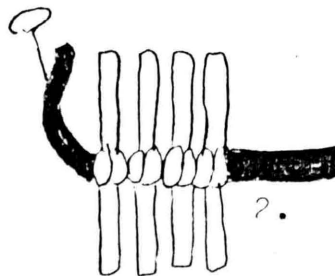


SQUARE KNOT BUTTON

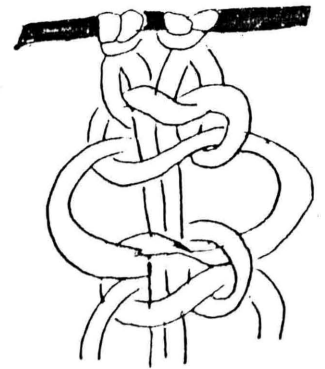
BUTTERFLY



DIAGONAL
DOUBLE
HALF-HITCH



HORIZONTAL
DOUBLE
HALF-HITCH



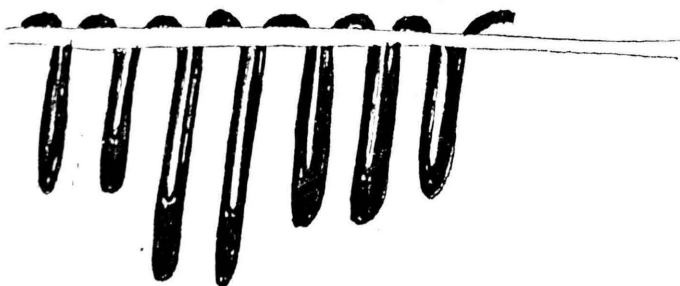
SQUARE KNOT PICOT

ILLUSTRATION VII-PUNCH NEEDLE

Follow the directions for threading the type of punch needle you have purchased. When using the punch needle, carefully push the needle through the burlap and gently pull out. Watch for pulling out too far or you'll pull out all of your loops.



For more interest in rug hooking, try varying the length of your loops. Most needles show how to adjust for this. You may want to also clip some of the loops for a shaggy look.



Belfer, Nancy. Designing in Stitching and Applique. Massachusetts: Davis Publications, Inc., 1972. P. 111.

TABLE I
COLOR CHART FOR OVERDYEING

Dye Color	Over Red Produces	Over Blue Produces	Over Yellow Produces	Over Brown Produces
Red	Darker Red	Purple	Scarlet	Reddish Brown
Blue	Purple	Deep Blue	Green	Very Dark Brown
Yellow	Scarlet	Green	Deep Yellow	Golden Brown
Brown	Brownish Red	Almost Black	Yellowish Brown	Darker Brown
Orange	Red	Dull Dark Gray	Light Orange	Tobacco Brown
Green	Almost Black	Greenish Blue	Light Green	Olive Drab
Purple	Reddish Purple	Plum	Almost Black	Very Dark Reddish Brown

COLOR CHART FOR OVERDYEING

Dye Color	Over Orange Produces	Over Green Produces	Over Purple Produces
Red	Light Red	Dull Brown	Reddish Purple
Blue	Dull Dark Gray	Bottle Green	Bluish Purple
Yellow	Yellow Orange	Light Green	Greenish Brown
Brown	Yellowish Dark Brown	Greenish Brown	Chocolate
Orange	Deep Orange	Yellowish Green	Reddish Brown
Green	Myrtle Green	Darker Green	Dull Dark Gray
Purple	Light Dull Purple	Dull Dark Purple	Darker Purple

86

Chart, Courtesy Putnam Dyes, Inc.
Quincy, Illinois 62307

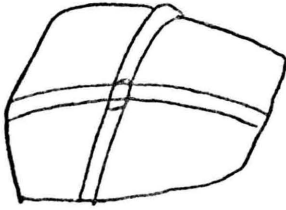
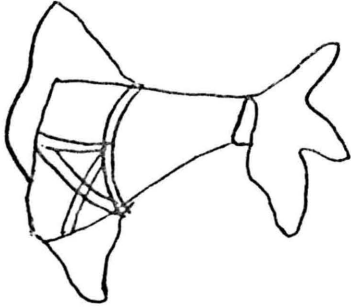


ILLUSTRATION VIII-TIE-DYE

MARBELIZING: Scrunch up fabric, tie randomly with rubber bands or string.



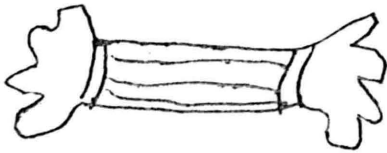
SPOTTING: Bunch cloth, place in plastic bag, then another plastic bag- tie securely- poke holes in plastic for spotting to occur.



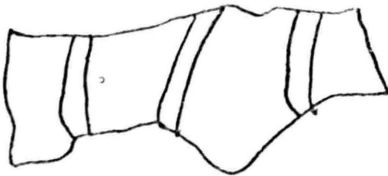
TWISTING: Twist cloth then tie securely.



CIRCULAR SHAPES: Pinch up a spot on the fabric, tie and continue tying around remainder of the fabric. A sunburst pattern is achieved.



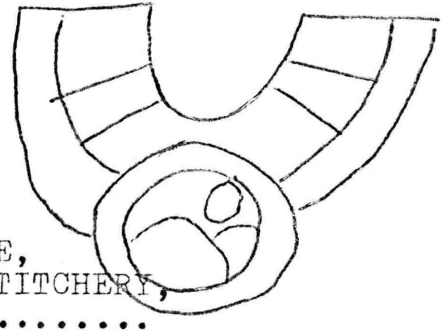
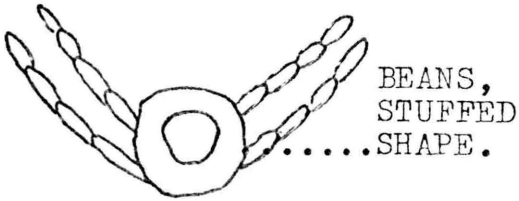
GATHERING: Gather up the cloth, tie as in circular shapes for sunburst pattern.



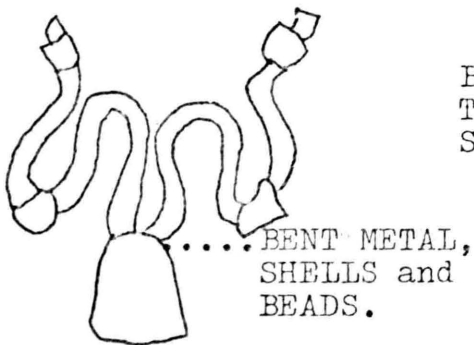
PLEATING: Carefully fold the cloth in accordian fashion and tie securely. You can control the design by watching where you tie the cloth.

TRITIK or STITCHERY: Draw up the thread sewn into the fabric causing puckers and folds. Subtle patterns can be achieved.

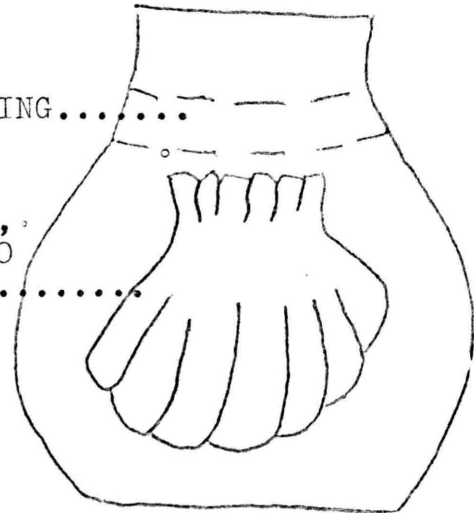
ILLUSTRATION IX-TIE-DYE JEWELRY



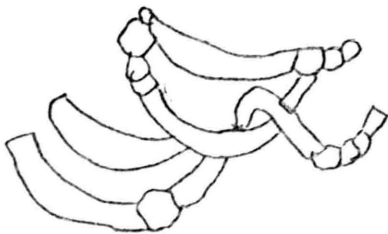
DRAWSTRING.....



BATIKED,
TRAPUNTO
SHELL.....

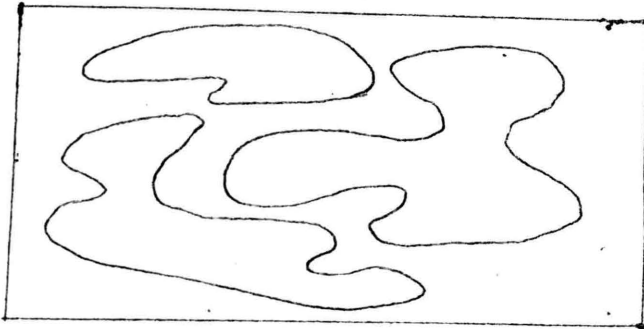


HANDBAG



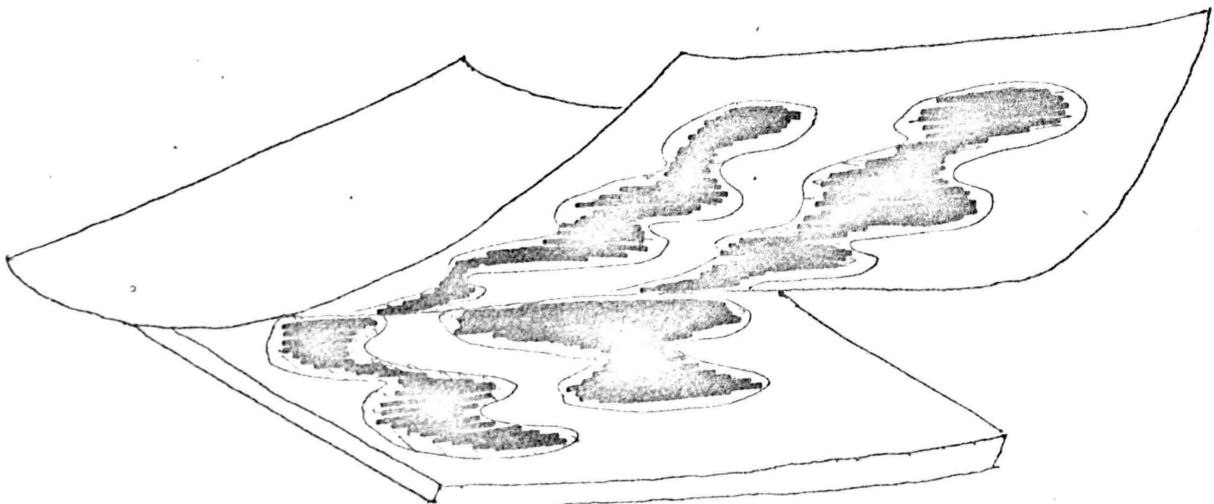
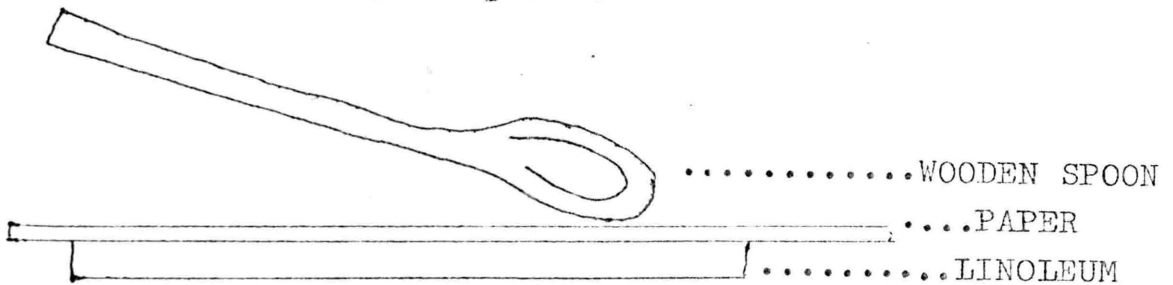
KNOTTED LEATHER,
BEADS and YARN.

ILLUSTRATION X-LINOLEUM PRINTMAKING



LINOLEUM ready for
printmaking.

The WOODEN SPOON is rubbed on the surface of the
paper which is on the inked linoleum.
This process is referred to as " pull-
ing the print. "



After applying pressure to the back of the
paper with a wooden spoon, carefully lift the printed
paper off the linoleum. Hang to dry.

ILLUSTRATION XI-COLOR WHEEL

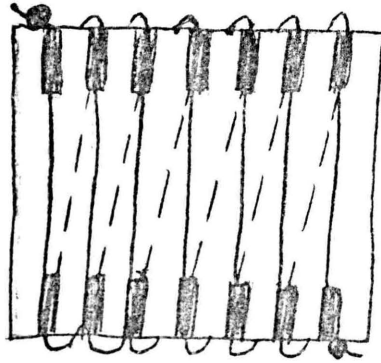
PRIMARY COLORS: RED, BLUE, YELLOW

SECONDARY COLORS: ORANGE, VIOLET, GREEN

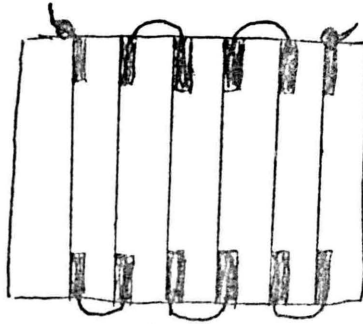
INTERMEDIATE COLORS: RED-ORANGE, RED-VIOLET, BLUE-GREEN
BLUE-VIOLET, YELLOW-GREEN, YELLOW-ORANGE



ILLUSTRATION XII-CARDBOARD LOOMS

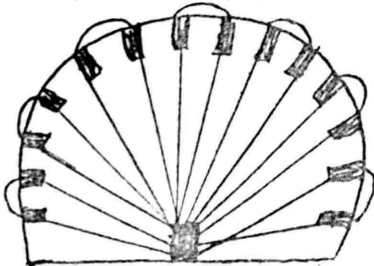


CARDBOARD LOOMS:
equally space the
notches across from
each other. Wrap
through the notches
and go around the
back of the loom.

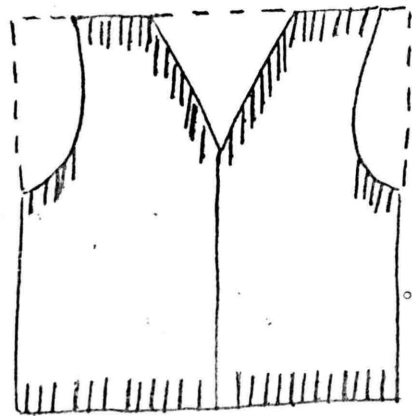


Or, you can go
across the notches
from the back and
not wrap across the
back of the loom.

Cardboard can be cut to fit the pattern. Odd-
shapes can be made into
cardboard looms.

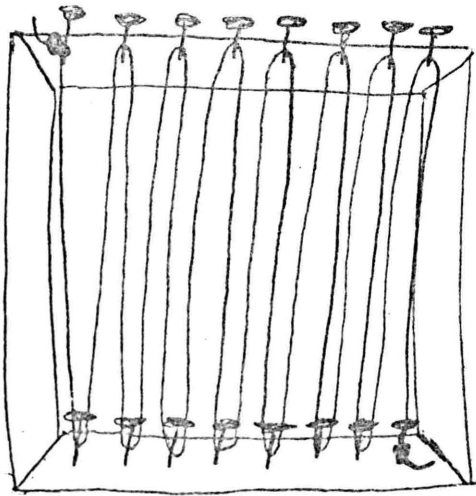
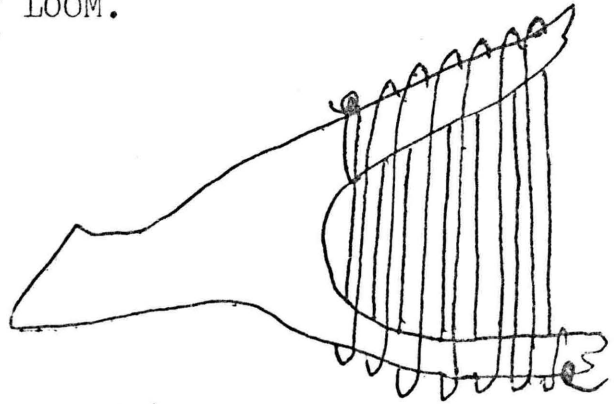


HALF-CIRCLE LOOM
for a handbag.



LOOM for a vest.

ILLUSTRATION XIII-ASSORTED LOOMS

WOODEN BRANCH
LOOM.

WOOD-STRETCHER LOOM with nails and warp.

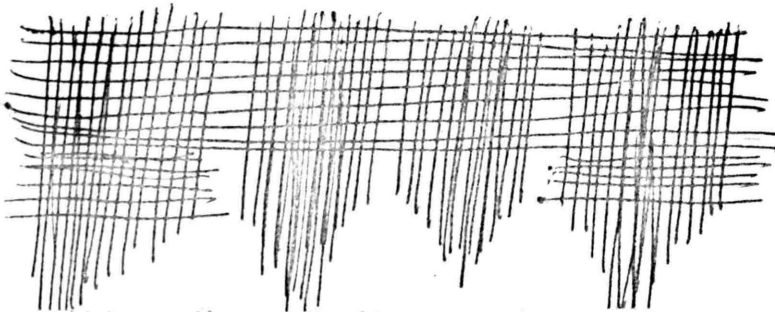
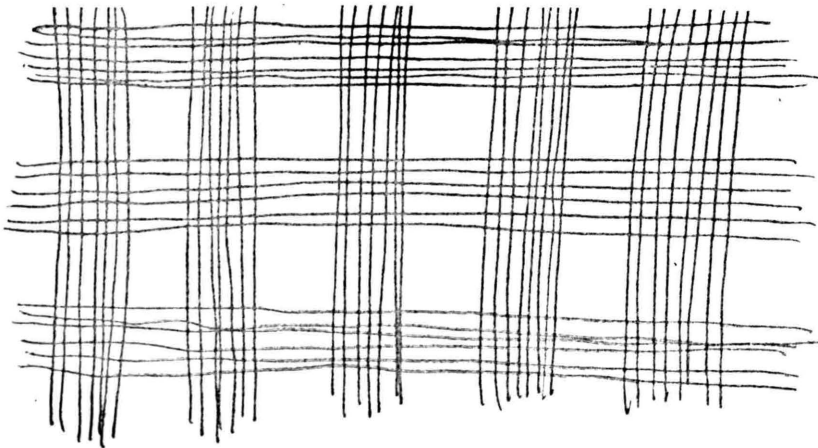
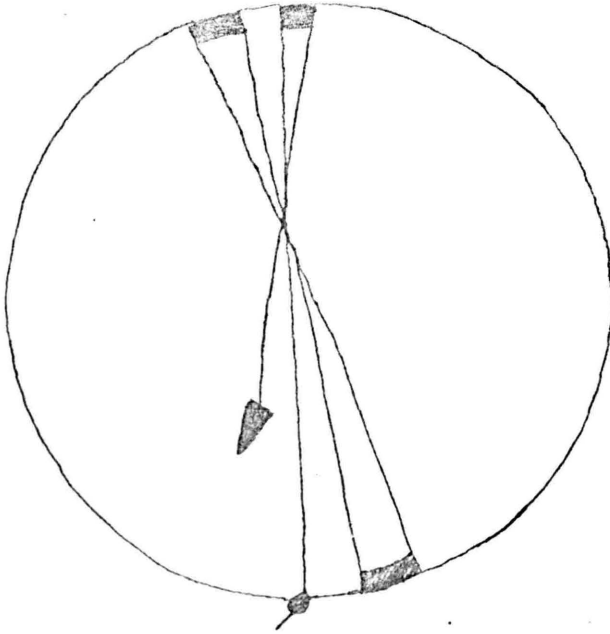
BURLAP can be pulled in different parts of the
weave to create interesting patterns.

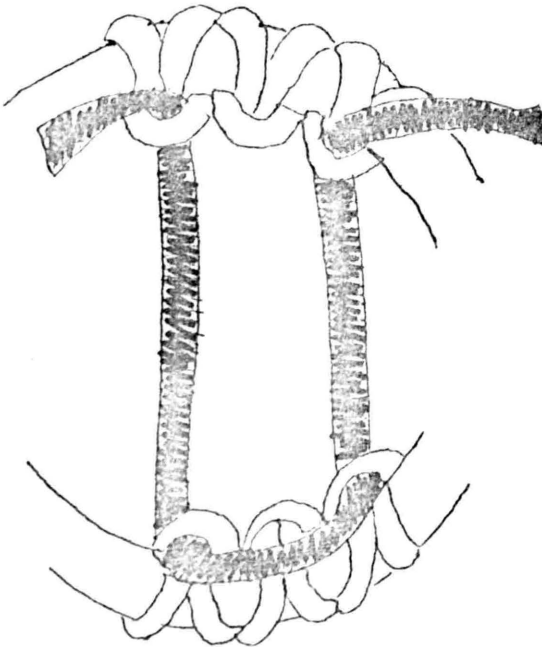
ILLUSTRATION XIV-HOOP WEAVING



CIRCULAR WARP
 Overlapp in the
 center and skip
 equal distances.
 Usa a strong warp
 thread.

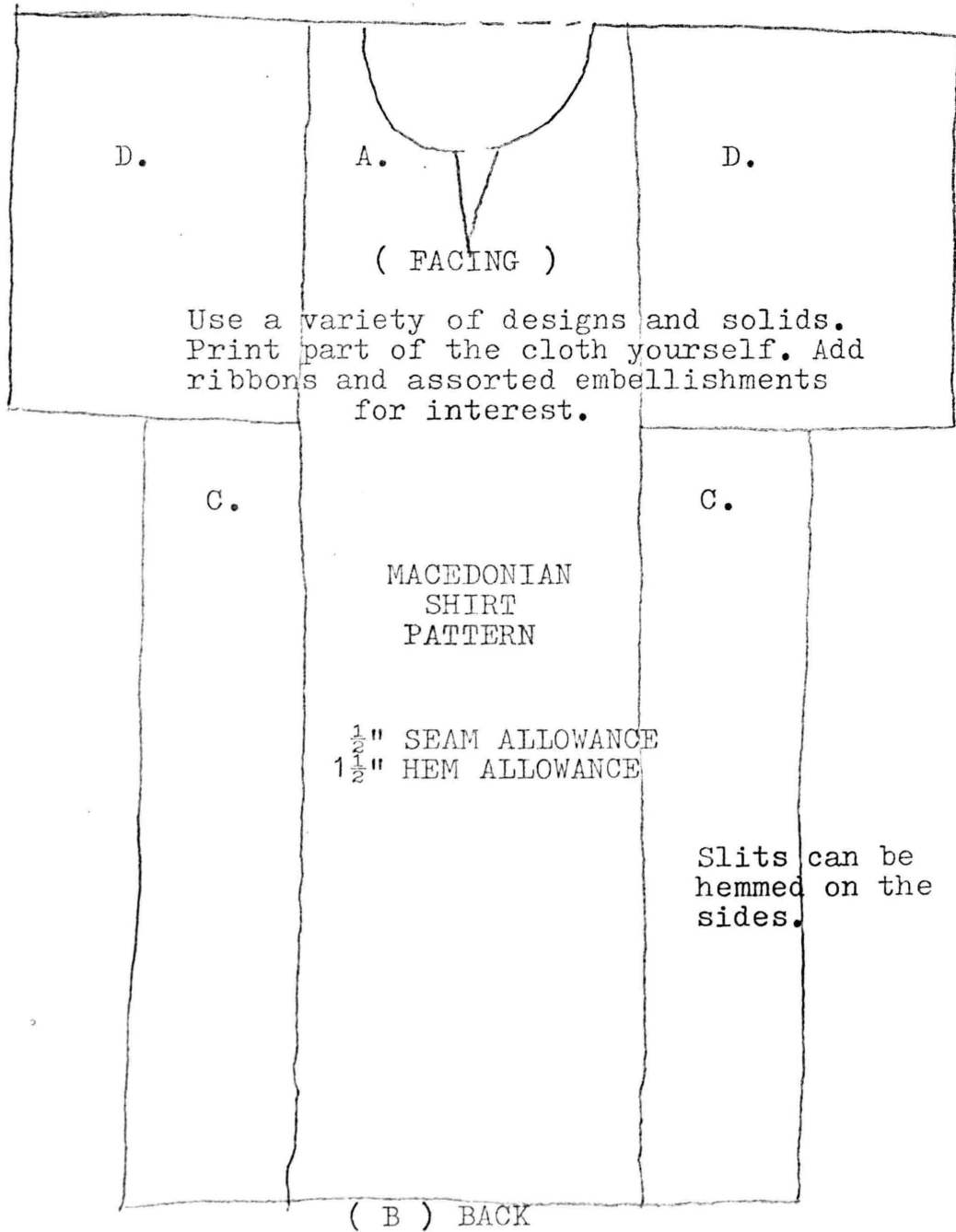


CONTINUOUS
 LARK'S HEAD
 WRAP all
 around the
 ring.



VERTICAL WARP through
 the LARK'S HEAD wrap.
 Skip equal distances
 between the top and
 bottom of the ring.

ILLUSTRATION XV-MACEDONIAN SHIRT PATTERN



MACEDONIAN SHIRT PATTERN

This Macedonian Shirt Pattern requires approximately three yards of fabric. Combine an assortment of fabrics and designs. Additional length can be added for a caftan instead of a shirt or tunic.

The width of the panels is determined by the hip measurement plus ten inches for ease and then dividing this number by four. You then decide on the shirt length.

You need: A. FRONT PANEL

B. BACK PANEL

C. FOUR SIDE PANELS

D. TWO SLEEVE PANELS

Measure the width of the sleeve: top of the shoulder to high-point of the chest.

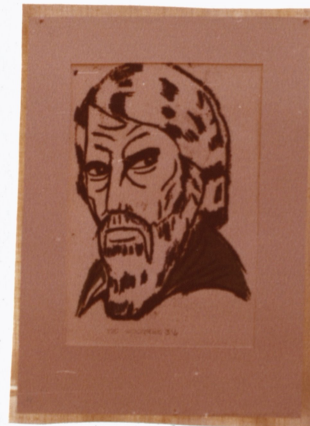
Length of the sleeve: center of the collarbone to length you want.

Pin and stitch front facing together. Use pellow for facing. Stitch A and B together. Lay the facing on the A and B panels. Design the collar. Stitch facings and panels together. Cut out the head opening and turn under. Stitch C and D together.

Stitch C and D to AB panel.

Add embellishments to A and B before attaching to C and D.

Silk-screen prints made by ninth graders.



Below. Crayon batik by eighth grader.





Crayon batiks
made by eighth
grade students.

Eraser prints
made by eighth
graders. Carrot
and potato
print designs
are incorpor-
ated within
the patterns.



Assorted eighth and ninth grade wallhangings done in stitchery with applique.



Assorted ninth grade hoop weavings with an array of warp configurations producing interesting patterns with positive and negative spaces. Assorted cotton and wool yarns, jute and feathers are used.





Upper. Ninth grade
small loom
weavings
with assort-
ed yarns.

Left. Ninth grade
hoop weav-
ings with
shells,
assorted
yarns and
macrame deco-
rated frin-
ges.



Ninth grade hoop
weavings using
feathers, assorted
yarns, shells and
paying close
attention to the
open spaces.



APPENDIX A
SOURCES FOR WEAVING AND TEXTILE DESIGN

SOURCES FOR WEAVING AND TEXTILE DESIGN

- | | |
|---|--|
| Contessa Yarns
P. O. Box 37
Lebanon, Connecticut 06249 | Novelty yarns, silk,
wools. |
| Macrame by Roberts Originals
1934 Prism Street
Houston, Texas 77043 | Macrame supplies, dyes,
beads. Free catalog. |
| Village Wools
401 Romero Street N.W.
Albuquerque, New Mexico
87107 | Yarns, looms, feathers.
Catalog and samples
\$.75. |
| Tandy Leather Company
8117 Highway 80, West
Fort Worth, Texas 76116 | Leather supplies. |
| Yarn Depot, Inc.
545 Sutter Street
Department 1
San Francisco, California
94102 | Handspun wools, single
ply white sheep hair.
Very irregular and
lumpy. |
| Mexiskins, Inc.
P.O. Box 1924
Missoula, Montana 59801 | Handspun Mexican yarn. |
| Belding Lily Company
P.O. Box 88
Shelby, North Carolina
28150 | Jute "Biggie" macracord,
Lily's rattail for mac-
rame triple twist mac-
rame cord, Lily navy
cord for knitting,
braided cord for knott-
ing. |
| AAA Cordage Company
3238 N. Clark Street
Chicago, Illinois 60657 | Yarns, threads, dyes,
beads, etc. Samples:
\$.50 (twines)
\$.50 (ropes)
\$ 1.00 (twine & rope). |
| Dick Blick Art Materials
P.O. Box 1267
Galesburg, Illinois
61401 | Dick Blick dyes, Putnam
dyes, wax, tjantings,
batik frames, pigments. |

Bona Venture Supply Company
17 Village Square
Shopping Center
Hazelwood, Missouri 63042

Dharma Trading Company
1952 University Avenue
Berkley, California 94701

Fabdec
P.O. Box 3062
Lubbock, Texas 79401

Fibrec
2815-18th Street
San Francisco, California
94110

Putnam Dyes
Quincy, Illinois 62301

Keystone Analine and
Chemical Company
321 North Loomis Street
Chicago, Illinois
60607

RIT
Best Foods Division
CPC International
1137 W. Morris Street
Indianapolis, Indiana
42602

Screen Process Supplies
1199 E. 12th Street
Oakland, California
94606

Versatex Textile
dyes, Dorland's
paste wax, pigments.

Fiber reactive dyes,
thickeners, waxes,
tjantings, frames,
unsized cotton.

Fiber reactive dyes.

Fiber reactive dyes,
thickeners, waxes,
tjantings.

Putnam all-purpose
dyes in soluble
packets. Putnam
fiber-reactive dyes
also available in
local drug and
grocery stores.

Fabric dyes, flame-
proofing materials.

RIT all-purpose pow-
der and liquid dyes.
Available in local
grocery and drug
stores.

Inkodye, wax, tjant-
ings, Indian Head
cotton.

7K Color Corporation
927 N. Citrus
Hollywood, California
90038

Dyes; direct acid
fluorescent dyes.

Las Manos, Inc.
12215 Coit Road
(in Olla Podrida)
Dallas, Texas 75230

Imported and domestic
yarns, weaving supplies,
macrame beads and mis-
cellany. Samples and
price list \$.75. Min-
imum order: \$ 10.00.

Tahki Imports, Ltd.
336 West End Avenue
New York, New York
10023

Greek, Irish, and Col-
umbian handspun yarns.
Various stuffings. Free
catalog and information.

Creative Handweavers
P.O. Box 26480
Los Angeles 90026

A variety of unusual
yarns, cords, etc.
Fleece, hair, basketry
and weaving supplies.
Wool and hair samples
set: \$ 1.00.

Earthy Endeavors
P.O. Box 817
Whittier, California
90608

Ceramics, Stoneware,
and porcelain glazed and
unglazed beads. Minimum
order: \$ 1.50. Wholesale
information available.

Freed Company
Box 394
Albuquerque, New Mexico

Coral, glass beads,
wampum Indian-made
strands, Turquoise,
wool fleece, mohair,
wool yarns, sheep-
skins, goatskins, lea-
thers, wool carders
and seashells. Free
price list and fliers.

Hollywood Fancy Feathers
512 S. Broadway
Los Angeles, California
90013

Assorted natural and
dyed feathers for
weaving, macrame, etc.
Minimum order: \$5.00.

General Arts and Crafts Supplies Catalogs Available:

Dick Blick
P.O. Box 1237
Galesburg, Illinois 61401

Lee Wards
840 N. State Street
Elgin, Illinois 61101

Sax Arts and Crafts
207 N. Milwaukee
Milwaukee, Wisconsin 53202

Triarco Arts and Crafts
P.O. Box 106
Northfield, Illinois 60093

In general many art supplies can be purchased in local stores. Check the yellow pages in your local directory under arts and crafts, fine arts, fabrics, dyes, etc. Most grocery and drug stores carry a good selection of dyes.

For assorted stuffings, check fabric stores, dime stores and catalog stores like Wards , Sears and J.C. Penney. Large discount chains like Woolco and K-mart should also be checked.

The Tandycraft stores carry a good supply of macrame, weaving, stitchery and leather resources.

Sources for Purchasing Looms:

LeClerc Loom Corporation
Department N.H.
Box 491
Plattsburgh, New York 12901

Gilmore Looms
10032 North Broadway Avenue
Stockton, California 95202

Schacht Spindle Company
646 Pleasant Street
Boulder, Colorado

APPENDIX B
PERIODICALS

PERIODICALS

Arizona Highways
2039 W. Lewis Avenue
Phoenix, Arizona 85009

Craft Horizons
American Craftsmen's Council
44 West 53rd Street
New York, New York 10019

Embroidery
The Embroidery Guild
30 East 60th Street
New York, New York 10012

Handweaver and Craftsman
246 Fifth Avenue
New York, New York 10001

Craft Midwest
Box 42B
Northbrook, Illinois 60062
Quarterly

Shuttle, Spindle and Dye-Pot
(with membership to Handweaver's Guild of America)
339 N. Steele Road
West Hartford, Connecticut
06117
Quarterly

Warp and Weft
533 North Adams Street
McMinnville, Oregon
97128
10 times a year

Fiberarts
50 College Street
Asheville, North Carolina
28801

APPENDIX C
RELATED ARTICLES FROM PERIODICALS

RELATED ARTICLES FROM PERIODICALS

January 1973

School Arts Magazine:

Sylvia Diamond. All Out for Macrame. pp. 12-13.

JoAnn Hawkins. Weaving. pp. 16-17.

Margo Kren. Batik for the Young Child. pp. 20-21.

November 1974

School Arts Magazine:

Burton Wasserman. Making the Gallery Scene. (stitchery on denim.) pp. 48-51.

January 1974

School Arts Magazine:

Wes Soderberg. Understanding the Meaning of the Purpose of Design. pp. 12-15.

Alfred F. Mis. Brayer Painting. pp. 16-17.

Harriet M. Jude and Barbara Tuch. Macrame. pp. 38-39.

K. Helena Laramee. Thrill with Threads. pp. 40-42.

January 1975

School Arts Magazine:

Margo Kren. The Orange Crate. pp. 12-15.

Ann C. Wischke. Macrame. pp. 24-25.

Mary Hughes. Straw Weaving. pp. 38-39.

Polly Schreider

School Arts Magazine:

Margo Kren. Ikat Dying. pp. 10-13.

Donna Pauler. Printing. pp. 14-15.

James G. Pollock. Quilting. Bee '75. pp. 26-27.

September 1976
School Arts Magazine:

Martha C. Lynch. Soft Sculpture: A New Form of Expression.
pp. 14-16.

Leona Nalle. Fiber Technique. pp. 46-48.

November 1979
School Arts Magazine:

David B. Van Dommelen . On Weaving: Past to Present to Idea.
pp. 22 -29.

Rosalie L. Ashe. Painting Cloth with Crayons. pp. 30-33.

Jennifer deGrassi. Very Soft Sculpture. pp. 34-35.

Elizabeth L. Lowery. Creative Stitchery for Children
with Learning Disabilities. pp. 36-37.

Eileen Divore. Batiks: Pillows and A Banner. pp. 38-41.

Margo Kren. Inkle Loom Weaving. pp. 42-44.

Marcia Hamilton. Safety Precautions in Fiber Arts.pp. 45-46.

September 1980
School Arts Magazine:

Jerry Speight. Inflated Forms.pp. 38-40.

March 1980
Arts and Activities:

See the cover (stitchery wall hanging)

January 1981
Arts and Activities Magazine:

Nancy Belfer. The Art of Stitchery. pp. 22-25.

Corky Stuckenbruck. Color and Fiber.pp. 26-27.

Wanda Hill. Weaving Wonderland. p. 29.

Young Artists. pp. 30-31.

Rosemarie Madarino. Fabric Crayons. pp. 32-34.

Val Freiling Krohn. The Union of the Two Crafts. pp. 36-37.

Kathleen A. Palano Ray. Fabric Design. pp. 38-39.

February 1981

Arts and Activities:

Sharon Dok. Paper Style Molas. pp. 33-35.

Mary E. Swanson. Matisse-An Inspiration. pp. 30-31.

Dona Z. Meilach. Papercutting: A Cultural Learning Experience. p. 32.

APPENDIX D
AUDIO-VISUAL AIDS

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AUDIO-VISUAL AIDS

BATIK: SLIDE PRESENTATIONS:

Slide kits are available from the:

American Crafts Council
29 West 53rd Street
New York, New York
10019

Send a stamped self-addressed envelope for rental information.

Tie-Dye, 1972. Historical and contemporart examples.
67 slides.

Javanese Batiks, 1970. The collection of Jane Gehring.
Mainly historical slides.
60 slides.

Tie-Dye Technique, 1972. Eileen Richerdson demonstrates
various approaches to tie-dye.
80 slides.

BATIK WALL CHARTS:

Putnam Dye-How to Dye Wall Chart
Putnam Color and Dye Corporation
Department P.S.
Box 1267
Galesburg, Illinois
61401

STITCHERY: PHAMPLETS:

Two phamplets each illustrating one hundred stitches:

Dictionary of Embroidery Stitches, 1961.
Woman's Day Magazine-\$.25
P.O. Box 1000
Deapartment WDL
Greenwich, Connecticuit
06830

One Hundred Embroidery Stitches
Coat's and Clark's Book No. 150-\$1.00
Coat's and Clark's Sales Corporation
430 Park Avenue
New York, New York 10022

STITCHERY WALL CHART:

Basic Stitches for Creative Stitchery
Eight basic stitches- free from:

Educational Division
Lily Mills
Shelby, North Carolina

16mm. FILMS:

Arts and Crafts of Mexico (Encyclopedia Britannica
Films) Color, 1961, 14 minutes.

Batik Rediscovered (Bach and Hines) Color, 1969,
9 minutes.

Rag Tapestry (International Films Foundation) Color,
1969, 11 minutes.

Weavers of the Past (Avalon, Daggett Productions)
Color, 1954, 13 minutes.

Weaving Homespun. (Association Films) B/W, 11 minutes.

FILMSTRIP WITH CASSETTE:

Educational Dimensions Group:
How To Do: Creative Printmaker (Part Two: Silk Screen)
How To Do: Textiles
How To Do: The Creative Weaver
How To Do: Weaving Techniques
Loomless Weaving
Creative Stitchery

APPENDIX E
CURRICULUM OUTLINES PUBLISHED
BY THE TEXAS EDUCATION AGENCY
AUSTIN, TEXAS

APPENDIX E

This course outlines for fiber manipulation and crafts for grades eight and nine curriculums stated in the revision of a 1970 Texas Education Agency bulletin titled Education Through Art: Secondary School, are as follows:

GRADE EIGHT

Processes in designing with fiber range from simple techniques of stencil, tie-dye, and batik to more complex activities such as weaving, stitchery, macrame, crochet, knitting, and hooking. Experimentation should be encouraged in order for students to learn the possibilities and limitations of processes and materials.

Weaving may be done on all types of looms from the most simple to the most complex. Color, design, and texture are emphasized in all weaving activities.

While making a piece of stitchery, the students will become familiar with threads, yarns, fabrics, and various other materials. They will observe how these work together either in contrast or in harmony for the desired effect.

Rug hooking as an art form will further the student's knowledge of utilitarian design as well as add opportunities for creativity and experimentation.

Decorative techniques such as stencil, silk screen, batik, and tie-dye give the student experiences in using color, value, and shape. Each of these activities is excellent for simple or in-depth problem solving processes.¹

¹ Texas Education Agency, Education Through Art: Secondary School (Austin, Texas: Texas Education Agency, 1970), p. 14.

ART I

Crafts are an important part of any high school art program, and students should have experience with several of the major craft processes. Ceramica, bookbinding, metal work and enameling are presented in the guide, for those crafts have been important throughout the history of mankind.

Through crafts the student gains practical experience in using the elements and principles of design. Each craft material makes certain design and construction demands which will influence the creative solutions to craft problems. Students are required to make choices and decisions as they work to express their own ideas and feelings with materials and tools of the craftsperson. For any craft activity to qualify as an art experience, creative action must be involved. A resourceful teacher will challenge students to explore, invent, and recombine materials. Good design and basic qualities of craftsmanship must be the expected outcome of an effective crafts program.

As a part of the craft experiences, students should have an opportunity to see original crafts and to become acquainted with the work of outstanding artists and designers in the crafts.

The student in Art I should experience a basic craft program with a variety of materials. This should be an exploratory period with a variety of materials and a time for the student to become familiar with several craft processes.²

² Texas Education Agency, Education Through Art: Secondary Schools (Austin, Texas: Texas Education Agency, 1970), p. 42.

APPENDIX F
A GLOSSARY OF
WEAVING AND TEXTILE TERMS

A GLOSSARY OF WEAVING AND TEXTILE TERMS

1. Applique: A two-dimensional approach of pasting one material on top of another. It includes the techniques of pasting, mono-rubbing and stitching.
2. Banner: A poster made of fabric. Basically it presents one idea. The image is simple and bold crystallizing the artist's idea in a concise visual statement.
3. Batik: Combination of wax and dye to create a design on fabric.
4. Brayer: A felt, gelatin, leather, composition or rubber covered roller for inking blocks or plates.
5. Collage: Art form introduced by Cubists and developed further by Dadaists. Originally the cutting and pasting of a variety of papers to form a design.
6. Dowel rods: Wooden rods used for hanging finished work. They may be inserted through the warp threads of the weaving, or the top of the weaving may be lapped over the rod.
7. Embroidery: Ornamental stitchery applied with a needle to a fabric ground.
8. Fabric: A construction made from fibers; a textile.
9. Felt: A nonwoven fabric constructed by interlocking loose fibers through a combination of heat, moisture, and pressure or friction.
10. Latex sizing: A liquid rubber used for painting the back of a hooked rug.
11. Linoleum cut: Relief Process. A block of battleship linoleum cut into with engraving tools, gauges, knives, etc. wherein the image to be printed is raised above the surface. Also a print from such a block.
12. Loom: An instrument as a frame, cardboard, or heddle loom, on which cloth is woven.

13. Macrame: The art of knot tying.
14. Potato (carrot) print: A print made by cutting potato (carrot) in half and carving a design into the flat surface. When ink or paint is applied to the design it may be printed on cloth or paper.
15. Punch needle: A tool with a gauge for setting length of loop. Used for hooking technique.
16. Quilting: The technique of using three layers of material together-top, interlining and bottom. The top and bottom may be of the same or different fabric, while cotton Dacron batting, or flannel is good for the in-between layer. Stitching through the layers with tiny, running stitches holds the layers together and at the same time, allows the unstitched parts to puff up.
17. Reverse-applique: A two dimensional pattern made by placing one material under another, then cutting out areas of the top fabric to expose the underlying one.
18. Squeegee: A flat, wooden bar with a wooden blade. The tool used in serigraphy to pull paint across the screen when printing.
19. Silk-screen (serigraphy): Stencil Process. A method of producing original, multicolored prints having a real paint quality. Paint, ink or other color is forced through a stencil of silk eachtime for each color required in the print.
20. Stitchery: Various types of stitches combined to form a design.
21. Taut: Tightly drawn threads of fabric.
22. Textile: A construction made from fibers; often used to refer specifically to woven fabric.
23. Trapunto: A variation of quilting. A stuffed rather than a quilted design that gives a high relief. This technique requires the same materials as quilting but only two layers of fabric.
24. Twining: A two-element construction in which two or more weft yarns are twisted around one another as they interlace with warp.

25. Utilitarian products: Having functional purpose such as tools, utensils, appliances, etc.
26. Warp: Thread arranged lengthwise on a loom.
27. Weaving: Interlacing of threads or fibers known as warp with threads or fibers known as weft to create a design in cloth.
28. Weft: Threads woven over and under the warp threads on a loom.
29. Yarn: A continuous strand of material spun from drawn-out and twisted fibers.

SOURCES: Held, Shirley E. Weaving (New York: Holt, Rinehart and Winston, 1978), pp. 377-381.

Heller, Jules. Printmaking Today (New York: Holt, Rinehart and Winston, 1965), pp. 250-257.

Rainey, Sarita R. Wall Hangings: Designing with Fabric and Thread (Massachusetts: Davis Publications, Inc., 1971), p. 154.

Rainey, Sarita R. Weaving Without a Loom (Massachusetts: Davis Publications, Inc., 1972), p. 130.

BIBLIOGRAPHY

- Alexander, Marthann. Weaving Handcraft. Illinois: McKnight and McKnight, 1954.
- Baity, Elizabeth Chesley. Man As A Weaver. New York: Viking Press, 1949.
- Belfer, Nancy. Designing In Stitches and Applique. Massachusetts: Davis Publications, Inc., 1972.
- Beutlich, Tadek. The Technique of Woven Tapestry. New York: Watson-Guptill, 1974.
- Blumenau, Lili. Creative Design In Wall Hangings. New York: Crown Publications, Inc., 1967.
- Brommer and Horn. Art In Your World. Massachusetts: Davis Publications, Inc., 1977.
- Buehr, Walter. Cloth from Fiber to Fabric. New York: William Morrow and Co., 1965.
- Chamberlain and Crockett. Beyond Weaving. New York: Watson and Guptill Publishers, 1974.
- Clark and Zimmer. Art/Design: Communicating Visually. New York: Art Education, Inc., 1978.
- Comstock, Nanina. The McCall's Book of Handcrafts. New York: Random House Publications, 1972.
- Conaway, Judith. Soft Jewelry. New York: Somon and Schuster, 1978.
- Davison, Margarite Porter. Handweaver's Source Book. Pennsylvania: John Spencer, Inc., 1973.
- Dendel, Esther Warner. Needleweaving...Easy As embroidery. Pennsylvania: Countryside Press, 1972.
- Eberle, Irmengarde. The New World of Fabrics. New York: Dodd, Mead and Co., 1964.

- Ericson and Ericson. The Bag Book. New York: Van Nostrand-Reinhold Co., 1976.
- Fearing, Beard and Martin. The Creative Eye: Volumes I and II. Texas: W.S. Benson and Co., 1979.
- Fisher, Leonard Everett. The Weavers. New York: Franklin Watts, Inc., 1966.
- Gatto, Porter and Selleck. Exploring Visual Design. Massachusetts: Davis Publications, Inc., 1973.
- Guild, Vera P. Creative Use of Stitches. Massachusetts: Davis Publications, Inc., 1973.
- Harris, Ned. Form and Texture: A Photographic Portfolio. New York: Van Nostrand-Reinhold Co., 1974.
- Held, Shirley E. Weaving-A Handbook of the Fiber Arts. New York: Holt-Reinhold and Winston, 1978.
- Horn, George F. Art for Today's Schools. Massachusetts: Davis Publications, Inc., 1969.
- Howell-Koehler, Nancy. Soft Jewelry, Design, Technique and Materials. Massachusetts: Davis Publications, 1976.
- Krevitsky and Ericson. Shaped Weaving. New York: Van Nostrand-Reinhold Co.
- Krevitsky, Nik. Stitchery, Art and Craft. New York: Van Nostrand-Reinhold Co.
- Lammer, Jutta. Print Your Own Fabrics. New York: Crown Publications, Inc., 1974.
- Mattera, Joanne. Navajo Techniques for Today's Weaver. New York: Watson-Guptill Publications, 1977.
- Meilach, Dona Z. Contemporary Batik and Tie-Dye. New York: Crown Publications, Inc., 1975.
- _____. Soft Sculpture and Other Art Forms. New York: Crown Publications, Inc., 1974.
- National Art Education Association. Art Education: Junior High School. Washington, D.C.: N.A.E.A., 1972.

- National Art Education Association. Art Education: Senior High School. Washington, D.C.: N.A.E.A., 1972.
- Rainey, Sarita R. Fiber Expressions: Knotting and Looping. Worcester, Massachusetts: Davis Publications; Inc., 1979.
- _____. Wallhangings: Designing with Fabrics and Thread. Massachusetts: Davis Publications, Inc., 1972.
- _____. Weaving Without a Loom. Massachusetts: Davis Publications, Inc., 1972.
- Reinhard, Gladys. Weaving a Navajo Blanket. New York: Dover Publications, Inc., 1974.
- Screen Process Supplies. Inko Silk Screen Printing Materials and Techniques. Oakland, California, 1971.
- Short, Eirian. Embroidery and Fabric Collage. New York: Charles Scribner's Sons, 1967.
- Sunset Books, the Editors. Stitchery-Embroidery, Applique, Crewel. California: Lane Publications, Inc., 1976.
- Waller, Irene. Thread: An Art Form. London: Studio Vista, 1973.
- Wilson, Jean. Weave with Style. Seattle, Washington: Madrona Publications, Inc., 1979.