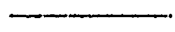


MINN. UNIV. DULUTH

THESES, PLAN B . . . : A HANDBOOK OF ART AND CRAFT ACTIVITIES

USING FLOWERS AND LEAVES



A Paper

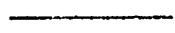
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Dr. William Gemeinhardt



A Requirement for the Degree
Master of Arts (Plan B)



by

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Chapter 1

THE PROBLEM

Introduction

Nature offers a great variety of materials to attract the attention and stimulate the interest of most individuals. Children are especially fascinated by many of the natural objects which the majority of individuals tend to overlook. Children are particularly inclined to use their senses to explore these common everyday materials of nature. They quickly glance at flowers, leaves, stones, pebbles, pieces of driftwood, cones, seeds, and other similar materials in nature's collection. Sometimes these glances merit stimulating questions, while in other instances they only view briefly and take for granted these treasures. Through the manipulation of these familiar objects an individual's observation of the beauty of the various forms of nature may be enhanced.

Purpose of the Study

The purpose of this study was to develop a handbook of art and craft activities using products from nature to be used in elementary classrooms. This handbook provides classroom teachers with a source containing varied art and craft activities using leaves and flowers.

Importance of the Study

Often times, especially in the fall of the year, elementary school children gather some brightly colored leaves and present them to the classroom teacher. With the expressed interest of one child, this may be an appropriate time to begin with some discussion of plants and observation of particular species. Sometimes with such valuable opportunities, instructors feel at a loss for a concentrated source of activities using these ready and available products from nature. This handbook is designed as a convenient source to aid the classroom teacher in experimenting with a variety of art media, using leaves and flowers in everyday art activities.

Limitations

In this handbook the use of products found in the natural environment is limited to generally only two types: leaves, including ferns and grasses; and flowers. This handbook includes a variety of art activities, some possibly tried previously by most teachers, and yet others requiring more time and greater patience which may be best suited for the upper elementary grades.

A broader inclusion of art activities from nature, including those of: rocks, stones and pebbles; fruits and vegetables; wood and driftwood; fungi and cornhusks; eggshells and sea shells; and even insects, would only superficially discuss each area and therefore would be very similar to the projects already used in many classrooms.

Definition of Terms

arts and crafts: the manipulation, creativity and skill used to make something expressing beauty and form

flowers: the plants and/or blossoms including wild species, sometimes undesired and termed "weeds"

lacquer: the general term used to describe a clear protective finish applied to recommended art and craft activities

stencil: a thin sheet cut to allow patterns to form beneath the sheet; the negative stencil

Organization of the Paper

The remainder of this paper is organized in the following manner. Chapter 2 is concerned with a review of selected literature relating to arts and crafts. Chapter 3 is the handbook and begins with an introduction, followed by a list of materials used in many of the activities. The next major division includes methods of preserving flower and leaf specimens for future use. This is followed by a division of activities using leaves, and another developing the use of flowers in art and craft activities for children in the elementary grades. The summary of the paper is found in Chapter 4. A list of the flowers protected by the State of Minnesota is given in the Appendix.

Credits

The collection of art and craft activities found in this handbook is composed from a variety of sources. Some of the art and craft projects are found in a number of the sources and others are those which have been tried and used in classroom situations and the original source is unknown. In these cases specific authors are not credited, but activities such as these are not the original ideas of the writer of this handbook. Those authors whose art and craft activities are not common to classroom teachers, or in the selected

materials are credited through the use of footnotes in this compilation.

Chapter 2

REVIEW OF LITERATURE

Background of Arts and Crafts

Previous to the twentieth century most crafts were created for practical purposes, or they were used for "religious rituals, social activities, theatre [sic], and entertainment." But the crafts of today are designed with the elements of art, including originality, imagination, expression and meaning.¹

As procedures in craft activities are being implemented in elementary classrooms, the children make choices or selections, thus developing an aesthetic judgment. Activities involving the use of materials to make something having form and beauty are referred to as art and craft activities. These activities should encourage children to use their knowledge, skills, originality, sensitivities, and experiences.²

"The purpose of art and craft activities," as suggested by Erdt, "is to awaken in children a lively and enduring interest in

¹Edward L. Mattil, Meaning in Crafts (3d ed.; Englewood Cliffs: Prentice-Hall, 1971), pp. 1-3.

²Mattill, p. 3.

art."³ She goes on to suggest that this may be achieved by challenging the children's potential creativity in a balanced classroom program.⁴

One of the most satisfying of all human experiences is to make something that is beautiful or useful--or both. . . .

 . . . Art is a creative expressive experience with activities where the vast range of skills and abilities, experiences, imagination, perceptions, ideas, and feelings come into action. . . .⁵

An art and craft program in the school should allow children to express themselves through a variety of materials.

Arts and Crafts from Nature

Children may manipulate raw materials to create a product from their own experiences.⁶

Nature offers a great wealth of possible materials for art and craft activities. As suggested in Creative Nature Crafts almost everything that we use or develop is derived from nature.

. . . The trees, plants, rocks, reeds, sand, shells, and animal life should be understood and appreciated by everyone.

. . . Pleasure and fun are derived from taking native

³Margaret Hamilton Erdt, Teaching Art in the Elementary School (4th ed.; New York: Holt, Rinehart and Winston, 1962), p. 3.

⁴Erdt, p. 3.

⁵Arthur S. Green, Creative Arts and Crafts Activities (Minneapolis: T. S. Denison and Co., 1960), p. 5.

⁶Green, p. 5.

materials and shaping them into creative and useful objects.⁷

In the use of nature products children should be encouraged to experiment using their imaginations. Because of the wide range of materials to be found in the surroundings, it should not be difficult to have a variety of imaginative creations.

Arts and Crafts for Children

Of all the curriculum areas of the elementary school, art offers the greatest opportunity for establishing conditions conducive to the development of creativity.⁸

It is through art and craft activities that children can ". . . listen to and enjoy the many messages that come through the senses, the shapes, colors, textures, sounds, and scents of nature"9

"Children are curious by nature. They come to us all perception--ready to smell, touch, taste, feel, look, think, and ask everything."¹⁰

Art and craft activities for children in the elementary school are usually exciting and meaningful experiences. Children enjoy the freedom, experimentation, movement, and involvement using

⁷Kenneth R. Benson and Carl E. Frankson, Creative Nature Crafts (Englewood Cliffs: Prentice-Hall, 1968), p. vii.

⁸Betty Lark Horovitz, Hilda Present Lewis, and Mark Luca, Understanding Children's Art for Better Teaching (Columbus, Ohio: Charles E. Merrill Books, 1967), p. 170.

⁹Horovitz, Lewis, and Luca, p. 171.

¹⁰Mattil, p. 7.

a wide variety of materials and techniques in their creations.

An art experience for children is a natural experience. Children do not think of art as requiring years of study and training in particular and difficult skills, but they feel confident that they can do the things they want to do in their own way; and so is born a child's honest attitude toward his art.¹¹

Art for all children is a common experience, no matter where or in what culture they live. Art is something that can be "read and understood by children." Art and craft activities give children "wholesome experience-social relationships, companionship, fun and investigation."¹²

Readiness. Recognizing the individual differences in children and their emotional maturity, art and craft activities "must be flexible and be prepared to meet their needs according to their degree of maturation and natural interests."¹³

Very young children's experimentation in art begins when they discover the materials and become absorbed with their manipulation. Children scribble and make circular motions in this beginning stage. Their drawing usually has no meaning to adults unless they relate the story or explain the picture, which they are often very willing to share. At this stage they totally enjoy creating, unless the reactions of an adult cause them to feel that their picture is inadequate.

When considering an arts and craft activity to be offered to a small child, Ickis emphasizes the necessity of understanding his motor control:

¹¹Erdt, p. 4. ¹²Erdt, pp. 4-5. ¹³Erdt, p. 3.

. . . His hands are not ready to hold small or complicated tools and materials. His span of interest is short; consequently, a craft must be finished quickly. Due to his limited experience a complicated design will be confusing. The child's sense of values and tastes are being developed at this time, so what he makes should be worthwhile. All of this is a learning process in which he may develop a working knowledge of cooperation, responsibility, and creative ability.¹⁴

As children continue to experiment they realize the likeness of their impressions to the real thing. In this stage of symbolism their illustrations are made in two-dimensions with no regard for proportion, but they are made in view of their personal perceptions.

. . . Children of the primary-grade level are unusually imaginative and free in their actions, are extremely active, and take great delight in handling materials of all sorts. At this stage of their physical and mental development they are inquisitive and interdependent, being unusually impressionable.¹⁵

As children mature to a greater degree they become more concerned with the reality of their illustrations to the subjects. During this stage they become more critical of their work as well as that of others.

Intermediate-grade children are generally less imaginative and more realistic in their outlook on life as well as in their activities; they are more self-conscious and self-critical and more critical of the work of others, more accurate and more discriminating, and more confident in their own mental ability, although extremely sensitive to difficulties. This sensitiveness to difficulties sometimes acts to inhibit their performance. . . .¹⁶

¹⁴Marguerite Ickis and Reba Selden Esh, The Book of Arts and Crafts (New York: Dover Publications, 1954), p. 191.

¹⁵Leon Loyal Winslow, Art in Elementary Education (New York: McGraw-Hill Book Co., 1942), p. 14.

¹⁶Winslow, pp. 14-15.

Growth and development. [Arts and] crafts in the elementary school help children to grow and develop in a variety of ways, as suggested by Mattil:

Physical growth in children is indicated by an increase in motor control and the coordination of body parts, such as the eye, hand, and mind when developing [art and craft] creations.

Along with the physical growth is the skill with which children use materials and discriminate between the various qualities in the available materials. Through the repetition of art and craft activities, with specific mediums and techniques, children gain confidence that helps to promote creativity.

Creative growth is expressed in the use of original ideas. Creativity or the aesthetic judgment found in children develops as they are allowed to make selections or choices.

Aesthetic growth is recognized by an increase in children's sensitivities to a harmonious organization of ideas and feelings rather than those of a stereotype.

Social growth is recognized by an increased sharing of materials and cooperation in group activities, including the recognition and appreciation of the feelings and needs of others.¹⁷

Erdt states:

. . . In a good art [and crafts] program, every painting, every drawing, every craft activity, every newly learned process contributes to growth. What appears to be mere handwork to an unthinking person may be of great importance to the child. Mind, spirit and manual activity form a unified experience emotionally, physically and

¹⁷Mattil, pp. 11-12.

aesthetically. An art experience is, therefore, vital to every day's work in school.¹⁸

Teaching Arts and Crafts

As the children become more critical and desire more realism the teacher's role is to:

. . . be helpful, understanding, and as sympathetic as possible, providing a comfortable working situation that will inspire the child to express himself more readily regardless of his use of media.¹⁹

It is during this stage of the child's development that the teacher must be truly aware of his reactions and conscious of his value judgments. It is now that the teacher must encourage the child to make decisions, and if desired by the child, corrections. These corrections are not to be those of the teacher, but of the student. The child needs guidance to help him discover what he thinks is wrong and how it can be changed. This guidance may be given by the teacher's use of stimulating questions such as these suggested by Horovitz:

. . . "How do you like it?" "Did you do what you wanted to do?" "Does it look the way you want it to look?" "If you were to do it again, is there anything you would change?"²⁰

Horovitz goes on to state: . . . "Accuracy in drawing is much less important than the sensitive use of art materials in expressing a personal interpretation."²¹

¹⁸Erdt, p. 4.

¹⁹Mary Jackson Ellis and Gene Watson, Creative Art Ideas: Third and Fourth Grades (Minneapolis: T. S. Denison and Co., 1959), p. 6.

²⁰Horovitz, Lewis, and Luca, p. 171.

²¹Horovitz, Lewis, and Luca, p. 130.

Children should be encouraged to be creative and original in their work in arts and crafts. There should be little work using patterns or expecting children to make replicas of given illustrations. Children will create if they are given a relaxed atmosphere and materials with which to work.

The teacher can allow the child to work with freedom and spontaneity, the roots of creativity, and also encourage him to work out his ideas with care, patience, and deliberation, and to evaluate his success in the light of his own goals and standards.²²

It is up to the teacher to supply the necessary materials and procedures for the children offering them sufficient resources for their success. By these considerations children are given a chance to create.

"Creativity thrives in an atmosphere in which the child feels free to be himself and express himself in his own way."²³

Children must be given time to experiment with new techniques and ideas to become aware of the various possibilities in which they may be used.

. . . It is important that the arts and crafts program be balanced to provide opportunities for fast, short-time projects using a great many materials in a large variety of ways as well as a number of basic arts and crafts experiences that are pursued in depth. This means that throughout the school life of the child, some activities, such as modeling, drawing, and printmaking are a regular part of the art program at every level. By repeatedly using the tools and materials of a few processes, the child can gain the skill necessary for him to carry out his ideas directly without always having to learn to use the tools first. When

²²Horovitz, Lewis, and Luca, p. 172.

²³Horovitz, Lewis, and Luca, p. 174.

the child's attention is focused primarily on the use of a new tool and the discoveries that accompany it, he is generally unable to focus fully on what he wishes to say with the tools. Ideally, the tool or material should become the extension of the child's thinking, not the focus for it.²⁴

. . . The alert teacher remains in the background while the child is succeeding but senses when he is in trouble and is ready to help him analyze his difficulties, to offer new stimulation, to expose him to the ideas and solutions of others, or to suggest that he let the problem rest for a while and return to it later.

. . . Too much direction deprives children of the opportunity to figure things out for themselves, to try out their own ideas, to act on the basis of their own curiosity and desires. . . .²⁵

Summary

Hoyland briefly summarizes the reason for art in the elementary school and the teacher's possible effect upon children through art and craft activities as follows:

All the children in a school benefit when art activities are a natural and lasting part of school life; for well-taught art brings an inventive sense of purpose to children, and self-respect. Sometimes, through art, a good teacher can waken something in a child that will open up new worlds for him, and change his life. And to be a good teacher of art you do not need to be a skilled specialist.²⁶

²⁴Mattil, p. 4.

²⁵Horovitz, Lewis, and Luca, pp. 173-174.

²⁶Michael Hoyland, Art for Children: Schooling in the Middle Years (London: Macmillan and Co., 1970), p. 9.

Chapter 3

THE HANDBOOK

A basic limitation for classroom teachers in using nature's products as art materials is the inability to have a ready resource, in suggesting ideas for various types of activities. There are several sources in separate monthly periodicals and a limited number of books, in varied locations, but they are not easily accessible. This handbook was developed in order to provide classroom teachers with an available source of art and craft activities using leaves and flowers for the elementary grades. These activities are not classified according to grade levels, but record a variety of activities to be selected by the individual classroom teachers and implemented according to the particular abilities and interests of the class or of specific individuals within the classroom.

LIST OF MATERIALS

Typical materials to be used in many of the art and craft activities and found in most classrooms are:

paper--white drawing, manila, colored construction, tissue,
crepe, newsprint, and scrap, tagboard, cardboard

paint--water color, tempera, powdered

paint brushes--water color, easel--(assorted sizes)

cord, string, nylon fishing line
 Scotch tape, masking tape
 pencils--black, colored lead
 chalk--blackboard, colored
 felt-tipped marking pens--assorted colors and sizes
 paste, glue paper clips
 crayons stapler
 scissors paper punch
 rubber bands soap

Other materials which are useful, but not always available
 in classrooms are:

brayer wheat paste
 ink pads chalk fixative
 modeling clay sponges
 pipe cleaners
 Plaster of Paris

Some materials needed for special activities which the chil-
 dren may bring from home are:

clear plastic--Saran wrap, Handi-wrap
 self-adhesive clear plastic--Contac
 glass or linoleum for spreading paints
 used magazines and telephone directories
 material--burlap, felt, fabric scraps
 liquid soaps, detergent
 clothes pins
 ammonia modeling glue
 waxed paper insect sprayer

newspapers	ribbon or yarn
toothpicks	wire coat hangers
tweezers	picture frames
styrofoam	

Materials for specific art and craft materials are not always available unless purchased for the particular projects. Some of these materials are:

lacquer--shellac, varnish, clear acrylic spray	
glass pane--for prints	floral tape
paint, enamel	floral wire
blue print paper	coasters
ozalid print paper	

PRESERVING FLOWERS AND LEAVES FOR FUTURE USE

To be used in creative art and craft activities, flowers and leaves must not only be gathered, but preserved for use in the future. Some activities will require the flowers and leaves to be pressed, while others will be more effective if the specimens are preserved in a three-dimensional form.

Pressing

Pressing flowers and leaves is the process used to dry and flatten the blossoms and foliage for future activities. Although some authors recommend the use of a flower or leaf press, this is not a necessary part of school equipment. Absorbant papers such as newsprint or discarded telephone directories are easily obtainable and very satisfactory. Guard against irregular surfaced paper toweling or glossy pages in catalogues or magazines.

Gather the desired plant specimens on a dry day during the midafternoon when there is the least moisture. This will assure a more rapid drying of the plant life. Some of the common flower species which dry satisfactorily by this method are black-eyed Susans, butter and eggs, buttercups, clover, daises, goldenrod, mullen, Queen Anne's lace, tansy, and violets. Do not neglect the many varieties of leaves, evergreens, ferns, and grasses.

Place the specimens carefully between the selected absorbant papers, arranging them as desired. Carefully cover them with a second sheet or page. Allow several pages to remain in between the next page on which plant specimens are arranged. This will help to

absorb more of the moisture. Leaves and petals may be pressed as found in nature or they may be divided, by separating the plant into individual leaves or petals, and reassembled for use in specific activities. After arranging the plant specimens between the absorbant paper on a flat surface, there must be sufficient weight to keep these specimens in the desired position. This weight may be additional books or magazines; or a board with weight placed on it.

Very large leaf specimens may be arranged on newspapers placed on a wooden surface such as plywood. Cover them with more newspapers and another piece of plywood. Remove them after a couple of weeks and if it is desired, they may be sprayed with a clear lacquer.²⁷

Most success with pressing flowers will occur if the flowers are thin and light-weight. The color of the flowers is most desirable just before the flower is in full-bloom. The length of time for drying depends upon the type of flowers and the atmospheric conditions. If the weather is damp it may be desirable to arrange the specimens on fresh papers. Guard against moving specimens which are very thin and delicate when partially dried, as they tend to wrinkle and they no longer remain in their original position.

This process may preserve the plants for an indefinite time, although when thoroughly dry the leaves become stiff and brittle, therefore becoming more fragile when used. If the activity would be more easily accomplished with a more pliable specimen, the pressed flower or leaf specimens may be renewed by placing them into water

²⁷Elaine Gould and Loren Gould, Crafts for the Elderly (Springfield, Illinois: Thomas, 1971), p. 61.

for a very short period of time and then removing them.

In many varieties of plants the color will change and become more drab. Sometimes this dull color may be enlivened with the application of water color paints.

Air-drying

The simplest method of obtaining air-dried plant specimens is to collect those already dried naturally in the meadows, valleys, on the hillsides, or along the roadways, during the seasons of late summer or autumn. Some common plants which may be air or field-dried are: goldenrod, grasses, mullen, steeplebush, and Queen Anne's lace.

A second way that plant specimens may be air-dried is to gather the flowers and push the stems into a box partially filled with sand, until they are thoroughly dry. This may also be done to insure that those which were thought to be field-dried, actually are thoroughly dry.

Another method of air-drying is to gather fresh plant specimens with a long stem and hang them upside down to dry. Such common specimens as: bittersweet, cattail, dock, field asters, goldenrod, Joe-pye-weed, pearly everlasting, tansy, and yarrow; plus many assorted grasses including quack grass and timothy; are suitable for drying in this manner. Gather nature's specimens when nearly in full bloom, during midafternoon on a dry day. While the specimens are still fresh, tie them tightly with string and hang them by the stems in an airy, dark, dry, and warm place. Drying time will depend upon the type of plants and the atmospheric conditions, but nearly all specimens will be dry by the end of two weeks. When the stems of the

plants are dry and break easily, the specimen is dry.

In using specimens dried by any of the above methods the individual may desire more or different colors to enhance them when they are used in certain art and craft activities. This may be accomplished by using either water colors or tempera paints, or if desired, spray paints of various colors including those of bronze, gold, silver, or white.

Dehydrating

To preserve flowers by dehydration, in a natural form, sand will work satisfactorily. This method will take longer than dehydrating them by using silica gel or a mixture of either sand and borax, or cornmeal and borax; but sand is inexpensive, readily available, and the color of the flowers remains vivid. When using the borax mixtures, or silica gel, the flowers may dry more readily; but with the borax the color will bleach if it is left for too long of a time.

Using dry sand, or any of the other mixtures such as: two parts borax and one part sand, it is desirable to pick flowers nearly in full bloom on a dry day around noon. Some of the common flowers suggested for this type of drying are: black-eyed Susans, daisies, goldenrod, Queen Anne's lace and roses. Many varieties of cultured flowers such as lupines, daffodils, gladiolias, pansies, peonies, tulips, and other plant life such as: mosses, mushrooms and fungi may also be preserved in this manner.

Some authors²⁸ suggest cutting the stem of the flowers one to

²⁸Katherine N. Cutler, From Petals to Pinecones: A Nature Art and Craft Book (New York: Lothrop, Lee and Shepard Co., 1969), p. 22.

two inches from the flower and replacing the stem with wire, by extending the wire through the center of the flower and bringing it back through the flower to be joined to the wire used as the stem. This allows a more flexible stem when using the preserved flowers in flower arrangements.

Select a box that may be tightly covered.²⁹ Fill the box with a layer of sifted sand at least to the depth of one inch. Flowers that have a flat face, such as daisies, may be placed face down on the drying medium and then covered with at least another inch of the drying medium. Other flowers such as peonies or roses may be placed face up with the wire, if it is attached, bent at the bottom and turned up to indicate where the flower is buried. Flowers that grow on a stalk are placed in a horizontal position in the drying medium. After the flower is properly positioned, carefully sift more of the drying medium over and around the flower, seeing that the mixture very carefully supports the flower. Cover the box and place it in a warm, dry location.

After approximately seven to ten days to as much as three weeks the flowers may be carefully removed. Begin by removing one flower and remove any of the particles of the drying medium with a water color brush or a Q-Tip. If the flower specimen is properly dried the texture will be that of stiff silk. If silica gel is used

Anne Orth Epple, Nature Crafts (Randor, Pennsylvania; Chilton Book Co., 1974), p. 30.

²⁹Cutler, p. 22.

and the flower becomes too dry it will crumble upon being removed from the mixture.

Glycerine

Some types of foliage may be preserved by using a solution of glycerine and water. The glycerine is absorbed by the leaves and this preserves them for an indefinite period of time. When selecting leaves for this type of preservation, consider those from hardier plants, trees, and shrubs; such as: apple, ash, dogwood, iris, ivy, maple, and oak. In the early morning or on a damp day, cut branches free of blemishes, and wash them.

Before placing the selected branches in the solution crush and split the bottom of the stems to aid in the absorption process. This may be done by placing the stems on a hard surface, such as a sidewalk, or chopping board, and pounding them with a hammer.

Mix one part of glycerine with two parts of water and pour into a tall, thin bottle to the depth of at least three inches. Put the crushed ends into the solution and place the container in a dry, ventilated room. The leaves are ready when little drops of moisture appear on them, or when they change color or take on a glossy sheen. This process may take from four days to two weeks. Flowers on the stems with the leaves are usually ready approximately at the same time as the leaves.

Some leaves such as ivy and lily-of-the-valley absorb moisture through the leaf surfaces and therefore must be completely immersed into a solution of one part glycerine and one part water. These may be placed in a glass container with a cover to decrease the amount of

evaporation. After several days when the leaves become darker in color, they may be removed from the solution and dried on absorbant paper. After drying for three or four days they should be washed in soapy water and rinsed in clear water and then dried. Spray paints may be applied to obtain the desired colors.

Not all types of foliage work equally well, but it is worthwhile to experiment.

Waxing

Individual leaves may be waxed by using one of two methods. The leaves for this process may be picked on a dry day during mid-afternoon and pressed for a couple of days.

One method that may be used is to place the leaves on one sheet of waxed paper and cover this with another sheet of waxed paper. Press these sheets with a warm iron until the wax melts and adheres to the leaves. The leaves may be cut from the waxed paper.

The second method is to hold the leaf by the stem and dip it into a pan of melted paraffin. Allow the excess paraffin to drip into the pan and hold it until the wax begins to harden. Place the leaf on absorbant paper to dry.

Entire branches may also be preserved by waxing. Place paraffin in a frying pan and melt it slowly. Dip in the leafy branches and cover all the parts of the leaves. Place the branch in an upright jar and arrange the leaves in place before the wax hardens. This procedure is especially effective with brightly colored autumn leaves.³⁰

³⁰Marguerite Ickis and Reba Selden Esh, The Book of Arts and Crafts (New York: Dover Publications, 1954), p. 160.

Not all leaves and flowers will be successfully preserved using any of the methods, but through actual manipulation and experimentation the instructor or the student will discover those which are the most effective for his needs.

LEAVES

Leaves, an abundant product in nature, are readily obtainable and easily readied as an arts and crafts medium. Included in the general grouping called leaves may be most of the leaves from any trees, most ferns and grasses, and the greenery from most flowering plants.

The study of leaves may be preceded by a nature hike or an outing in which the basic shapes of both the trees and their leaves are observed and the most common types identified. Younger children will enjoy working with the basic leaf shapes. Older children become interested in the structure and composition of leaves, and in the development of creative activities through the use of a greater variety of art mediums and techniques.

Perceiving

A possible method of introducing the study of leaves may be to begin with a class walk. The size and formation of trees, as well as their general shape and the shape of the crown including the arrangement of branches may all be considered. To extend the children's power of perception various activities may be employed.

Observing trees. One method by which the instructor may note the student's power of observation is for the entire class to observe a specific tree; discussing, noticing, and even touching the tree to observe the basic shape, the branch placement and formation, the type of trunk and the individual leaf shapes.

After returning to the classroom the children may be instructed to draw on paper the tree from memory, without any further observation of the tree. This drawing may be followed by a second viewing of the tree in which the child may compare his drawing with the tree itself. Using another color, the original drawing may be corrected, as the child observes the tree this second time. This type of project encourages observation and helps the child to become more aware of his visual perception of objects.

Sketching trees. With a group of older children the instructor may have sketching in mind, in which case, the class members would have taken a sketching pad consisting of several sheets of paper, and something such as a magazine to support them, and a pencil. After carefully observing various types of trees the class members may choose two or three types they desire to sketch. They may then establish themselves in a comfortable position in which they can clearly see the tree and sketch.

Designing "Autumn Trees."³¹ If the instructor does not desire sketching the trees out-of-doors, after returning to the classroom each child may be given a twelve by eighteen inch piece of manila or construction paper. They are then to be encouraged to draw a tree that they saw, to nearly cover the paper allowing space for some leaves. After they have drawn the trees they may wish to color them with

³¹Irene Robbins, Elementary Teacher's Arts and Crafts Ideas for Every Month of the Year (West Nyack, New York: Parker Publishing Co., 1970), p. 39.

crayon. Now they may tear tissue paper, using autumn colors, into various sizes and shapes. These may be pasted to the crayoned branches to resemble leaves. Some of these leaves may be arranged separately, while others may be overlapped. The tree may then be cut out and mounted on a desired background.

Painting scenery. An autumn scene painting of leaves is also an interesting activity for elementary school children. After observing trees in their autumn splendor, encourage children to use what they see in nature to create a picture.

Very young children can make the tree trunk with an easel brush and apply tempera color for the crown with pieces of sponge or with large brushes. They should be encouraged to overlap the colors. Older children may wish to combine two or three trees in one picture.

Children in the upper elementary grades may plan a nature scene and use very rich water color paints to design the leaves. Children should be taught to first use a water color wash to make the background including the sky and ground. After this dries the prominent tree trunks may be completed. Then using a very rich amount of water color they may add the colored foliage. Allowing the children to mix their desired autumn colors using only the primary colors becomes a meaningful task in this activity.

Leaf Printing

Printing leaves is the process whereby an exact copy of a particular leaf shape is reproduced. Usually the veined side of the leaf is covered or coated with any of a variety of art media and a

print is transferred from the leaf to the selected paper or fabric.

Crayon printing. A very simple method of making a leaf print which may be used by very young children successfully is to place on a pad of paper a leaf with the veined side up. Next position the paper to be used for the print. Using the side of a crayon, rub gently but firmly over the leaf in only one direction. The crayon will clearly indicate the basic outline of the leaf along with the major veins. This print may be used as an all-over design or in combination with a tree trunk to design a picture. This makes an effective fall scene with leaves on the trees and others scattered on the ground.

This procedure used in combination with grasses, overlapped and curved, produces very desirable results.

Printing with paint. One simple method of using leaves to make prints is to apply paint to the veined side of the leaves and apply this directly to the paper that is to be printed.

Children begin by selecting leaves with well-defined veins. It is a good idea to allow the children to experiment, but the leaves of American elm, maple, oak and rose bushes are especially good. Using a brayer, spread tempera paint on a piece of glass, cardboard, or linoleum. Place the leaf with the underneath side down into the color, remove it, and place it carefully on the paper to be printed. Press the leaf carefully and quite firmly using the fingers and thumb. Peel the leaf carefully from the paper making a special effort not to smear it. The instructor may find it advantageous to allow the children to experiment on scrap paper to insure the proper amount of paint and pressure to be applied to the leaf; and to place scrap paper on the

top side of the leaf when printing, so that the paper is not smudged and the leaf is not torn as it is rubbed.

Finger paints or printing ink also work successfully with this method.

For younger children an easier method of applying the paint is to brush paint directly on the back side of the leaf, using a brush. If water colors are used it is desirable to wet the brush and then to dip it into paste for a greater adherence of color.

A printing pad may be made by placing a rather flat sponge into a shallow dish. Partially fill the dish with thinned tempera paint. Place the leaf veined side down on the sponge which is coated with paint and place the leaf with the painted side up on a padded surface. The paper to be printed may be positioned carefully over the leaf and rubbed. The leaf will adhere to the paper and it should be removed cautiously by the stem. This process also works well in reverse as described above. Coat the leaf with paint and place the painted surface down on the paper. Cover the leaf with scrap paper, rub and remove with caution.

Very young children can make leaf prints by using a leaf with well-defined veins, glued to a large brayer. The child coats the leaf with paint by rolling the brayer over paint which has been spread on a piece of glass or linoleum. After the leaf is coated with paint it is rolled over the paper to be printed. To simplify making prints of leaves of different colors it may be helpful to arrange various painting stations, each with a different color and a brayer and leaf all ready for use.

Another effective idea is to make a tempera paint leaf print on the paper, but before removing the leaf, cover a piece of cardboard carton with a contrasting color. Place the cardboard over the leaf and rub both the leaf and the cardboard. This gives the leaf arrangement additional texture. This is an exciting activity, but it must be completed rather quickly so the leaf will not dry to the paper, before the entire process is complete.

Block printing. Block printing is especially effective using grasses and leaves. Begin by gluing a leaf with the veined side up to a wooden block. Ink or paint may be applied to the veined side of the leaf with a brayer which has been rolled in paint from a piece of glass or linoleum, or even a cookie sheet. The block is then placed face down on a piece of paper placed on top of a thick pad of newspapers. Exert enough pressure on the block by pressing, pounding, or even stepping on it to make a showy print. The outline of the block will show on the final print.

Chalk or graphite printing.³² Printing with colored chalk or graphite is possible by using cotton to apply the desired media on the veined side of a leaf. After placing the desired paper on a padded surface, the leaf is placed veined side down and covered with scrap paper. Using a brayer carefully make a leaf print. It is necessary to use a fixative to prevent smudging with this type of printing.

³²Robert O. Bale, Creative Nature Crafts (Minneapolis: Burgess Publishing Co., 1959), p. 18.

Blueprints. An especially delightful activity for older children is that of blueprinting. In this case it is necessary to purchase blueprint paper of medium printing speed. Take all precautions to keep the paper wrapped and in a dark, dry place. For this project a piece of glass that is larger than the blueprinting paper, a piece of heavy cardboard, masking tape, and a pan with cold water are necessary items. The edges of the glass may be covered with the masking tape for a border around the completed arrangement, and for a place to hold the glass without the fingerprints showing, as well as for safety. Choosing specimens with interesting outlines, the leaves and flowers may be arranged on the glass, placing the blueprint paper over the arrangement, with the blue, coated surface facing the glass.

Cover the blueprint paper with the cardboard or a similar material. Carefully turn the whole arrangement over so that the glass is facing up. Take this arrangement out-of-doors and expose it directly to the strong sunlight until the paper changes to a greenish-gray color. After it has been sufficiently exposed it may be moved to the inside. Place the exposed paper face down in the shallow pan of cold water for approximately five minutes until the color changes to a deep blue background with the arrangement in white. It may then be removed from the water and laid on absorbant papers to dry.

Ozalid prints.³³ Ozalid prints are similar to the blue prints except that the arrangement will be in color while the background

³³Bale, pp. 6-7.

remains white. Ozalid paper shows fine detail and is excellent for delicate flowers. Rather than using a large pan with the cold water it is necessary to have a large glass jar with a tight cover to hold the paper and a small jar or a piece of sponge to place ammonia inside of the large jar. Arrange the flowers or leaves on the glass as in the blueprints and then place the ozalid paper with the yellow or glossy side down. Expose the glass side to the strong sunlight until the paper turns white. Now remove the glass from the sunlight and place the paper into the large jar with the ammonia and close the cover. If the print is uneven remove the paper and replace it upside down. Leave it in the jar until the print is a deep, even color.

Sun prints.³⁴ A very simple type of leaf print to be made by young children is the sun print. This type of print is made by fastening one or more leaves to a piece of construction paper and allowing this to remain in the bright sunshine. After exposing this to the sun for a couple of hours, remove the leaves and the leaf outlines or silhouettes will remain.

Smoke prints.³⁵ Smoke printing is another type of printing to be used to print leaves. Carefully rub paper, such as mimeograph paper, without a glazed finish with a small amount of shortening, without wrinkling the paper. Covering an area larger than the leaf

³⁴Avery Magle and Joseph Leeming, Fun With Naturecraft (Philadelphia: J. B. Lippincott Co., 1964), p. 42.

³⁵Bale, pp. 8-9.

to be printed, rub the paper until it is translucent with no visible grease remaining on the surface. After lighting a candle stub, pass the greased side of the paper face down, horizontally through the tip of the flame until the greased area is coated with a uniform velvety coating of smoke. The continuously moving paper should not come in contact with the wick to prevent either a possible grease spot or a flame. Place the veined side of the leaf to be printed down on the smokey coating. Cover it with scrap paper and press it with the fingers to cause the smoke to adhere to the leaf. Remove the leaf from the smokey coating and place it on the paper to be printed, rubbing the leaf from the center outward, using caution not to move the leaf for a clear print. If desired, powdered paints may be applied for color while the smoke print remains fresh.

This type of activity requires careful planning and caution due to the fact that it is necessary to work with an open flame. As an added precaution, a pan of water may be placed near the working area. In case the paper should catch fire, submerge it, and begin again.

Ink pad prints. Other leaf prints may be made by using assorted colors of ink pads. This is especially useful for small leaves. The leaf is placed veined side down on the ink pad and then covered by a scrap piece of paper and is rubbed with the fingers to pick up the color. Then the paper and the leaf are removed from the ink pad and placed with the inked side down on the paper to be printed. Rub the leaf firmly, but without moving or smudging.

Carbon paper prints. Carbon paper prints may be made by placing a leaf veined side down on carbon paper. Cover the leaf with plain paper and rub the portion of the paper covering the leaf with the fingers. After the leaf has been covered with the carbon it may be placed on another sheet of paper and the print may be transferred by rubbing the uncoated back side of the leaf firmly with the fingers. This print may be sprayed with a fixative to prevent smearing.

Spatter painting prints. Spatter painting seems to intrigue most children, but before considering this activity be prepared for "spatters." Fasten a variety of leaves with pins or a small amount of glue to white or colored paper. The leaf may lie in a flatter position if it has been pressed for a couple of days. Using discarded toothbrushes, trimmed to have even bristles, dip the toothbrush into water color or tempera paint. Spatter the color against the leaf and paper by moving a finger or a paint brush handle along the brush bristles. It may be necessary to experiment on scrap paper to find the best way for each individual to achieve the desired amount of paint and size of drips. Cover the paper with spattering and carefully remove the leaf. The outline will be distinct if sufficient paint was used. One or several colors of paint may be used. Guard against an excess amount of paint, as it may blot.

This process may be altered slightly by the use of a small piece of screen approximately six inches square. Rather than using fingers or a brush handle, rub the brush over the screen. This procedure will insure the spatters to be more uniform in size. In the case of very young children the screen may be placed over the open

side of a box such as a cigar box, after first placing the paper followed by the leaves into the bottom of the box.

Spray painting prints. Another method similar to the spatter painting is that of spray painting using an insect sprayer which may be purchased at a hardware store. An effective method is to cover an area with newspaper and place the background paper on this in an upright position. Arrange the leaves in position and fasten them with straight pins to the background. An easel makes an effective work area for this project. Thinned tempera paint is used in the sprayer and the children spray a picture of leaf shapes.

Young children find it difficult to steady the sprayer and to spray the paint onto the background paper. Supervision is necessary to encourage the proper amount of paint applied to the paper in order that the leaf shape will stand out sufficiently and that too much paint is not used, causing it to run down the paper.

Commercial spray paints may also be used for a similar effect.

By using the negative stencil the leaf shape may be made in a similar manner. This type of activity may be completed on a dark color background with the leaves painted the desired colors.

Double prints.³⁶ More advanced students may wish to make double prints. The leaves are first used as positive stencils in designing a spatter painting. After the spatter painting has been

³⁶Evelyn Struble, "Several Ideas for Leaves," Instructor, September, 1973, p. 120.

completed, the leaves are coated with paint on the veined side and placed down on the spattered design to make a positive leaf print. In this picture the spatter painting and the basic leaf print are combined for a total design.

Plaster leaf cast prints.³⁷ This project requires several materials including Plaster of Paris, a small paper dish, and vaseline or a solid form of shortening such as lard. A leaf which has been greased on the veined side is placed veined side up into the bottom of a greased paper dish or lid. The Plaster of Paris should be mixed to the consistency of thick cream and poured into the dish completely covering the leaf. After allowing this to dry for at least an hour remove this form from the dish. After allowing it to dry yet more thoroughly it may be washed with soap and water to remove any of the remaining grease. After it has dried for at least twenty-four hours the print may be painted as desired. Water color paints will work well. These leaf casts may be used as paperweights or as decorative wall hangings. If it is to be used as a wall hanging, insert a paper clip into the liquid Plaster of Paris and allow to harden into position.

Uses of leaf prints. The various types of leaf prints may be used in a variety of ways, such as: leaf identification, pictures for display or to be used as gifts, notebook covers, covers for tin cans

³⁷Sylvia Cassell, Nature Games and Activities (New York: Harper and Row, 1956), pp. 26-27.

or boxes, cards, decorative wrapping paper, placemats, or stationery and notepaper.

Following are two specific ideas for pictures which use leaf prints.

One way of preparing a background on which to print leaves is to give the children a sheet of white or off-white paper. The children may color or paint a background or they may wish to make a background by using other colors of construction paper, either cut or torn. The application of light water colors has been found to be very effective. The leaves may be dipped into the paint or the paint may be applied with either a brush or a piece of sponge directly to the veined side. The prints may be applied to the desired positions of the prepared paper.

Leaf prints may be used in the creation of specific items such as "Leaf-Print Pets."³⁸ This article suggests using brayers for this work, but other methods of applying paint may be used. Apply tempera paint to the veined side of the leaves and apply the print to a desired background. Cover it with scrap paper and roll over this paper with a clean brayer or rolling pin. Add details to create a particular animal, person, or design with either crayons or markers. Other details to enhance the picture such as leaves or ground may be made with either of the above media, or prints of grasses may be made similarly to the leaf prints.

³⁸Crafty-Ideas File, "Leaf-Print Pets," Instructor, August, September, 1972, p. 159.

In all activities involving printing with leaves children should be allowed to evaluate their leaf prints by considering: the variety of types and shapes of the leaves; the amount of paint that was used; the amount of pressure applied; and whether or not the background was appropriate in design and color.

Assorted Activities Using Leaves

Leaves may be used for a variety of specific activities. The collection of activities that follows may be used in elementary classrooms. Included are a variety of procedures including those of: silhouettes, stencils, skeletons, figures, etchings, resists, rubbings, tissue projects, and waxed leaves.

Leaf silhouettes. Young children will enjoy making leaf silhouettes when working with leaves. This activity may be repeated by using several types of media including: chalk, crayon, paint, or ink. When paint or ink are considered it is necessary to use sponges or brushes employing either the dry or wet brush technique. Position a leaf on a piece of white, or if desired, colored construction paper and hold it firmly in place. After having decided upon the media to be used, use outward motions beginning on the leaf and extending outward onto the paper all around the leaf edge. Remove the leaf to observe the silhouette. When considering the use of ink, one simple method is to use an inked stamp pad and a small piece of sponge to apply the color.

Leaf silhouettes may be used individually as in leaf identification pictures or they may be used in combination to design an over-

all print or picture. In the later case, when overlapping may occur, separate colors may be used for each leaf.

Stencil pictures. Place a negative stencil of a leaf cut from stiff tagboard on a piece of construction paper. Using either a stencil brush or the stencil method of dabbing with a relatively large paint brush, apply the color inside of the leaf shape. Remove the stencil carefully. This may be used to design a multicolored autumn leaf or the same stencil may be used several times on one piece of paper to make an all-over leaf design.

Leaf skeletons. Choose a fresh interestingly shaped leaf with which to work. Place the leaf on a small piece of carpeting which is then placed on a wooden base. Using an old shoebrush or hairbrush made of natural animal bristles, tap gently on the leaf. This will remove the part of the leaf containing chlorophyll, or the fleshy part of the leaf. Turn the leaf over occasionally working from either or both sides. The leaf is complete when there is only the skeleton shape remaining. To preserve the leaf skeleton it may be affixed to paper and covered with clear plastic or it may be placed between two pieces of plastic, or framed under glass.

Leaf figures.³⁹ Small leaf figures may be made by selecting leaves to form a body. These may be pasted to a stiff paper or a light-weight cardboard. Cut this leaf from the paper. Paste twigs or leaf

³⁹Nagle and Leeming, p. 39.

stems from the body to form appendages. If desired, hands and feet may be made from buttons or cut from paper. The head may be drawn free hand or one may be cut from a magazine or catalogue. The doll may be made to stand with the aid of paper supports in back.

Other suggestions may be to use waxed leaves for additional strength, or to make the entire figure on the cardboard. This whole figure may be cut out and made to stand with the aid of supports in back.

Leaf decorations. Leaves or grasses may be used in their natural state for leaf decorations, by gluing them directly to the object to be decorated. To remain in a flattened position, they should be pressed before being glued. When the glue is thoroughly dry the leaves may be coated with a clear lacquer.

Leaf pictures. Leaves may be used to make pictures of various types. Young children enjoy arranging pressed leaves into people or animal figures. After collecting and pressing a variety of leaf shapes and sizes children should be encouraged to arrange and manipulate them on paper or desk tops, until they can make a satisfactory picture. One entire lesson may be spent in designing leafmen. Other lessons may be used to make leaf animals, flowers, or trees. Older children may find more satisfaction in arranging a scene made from leaves, or to combine a leafman and a leaf animal to form a more complete picture. Also, twigs used in combination with these leaves help to make very expressive characters. To protect this arrangement after it has been glued to a background paper, clear plastic or clear self-adhesive plastic may be applied.

Leaf scapes.⁴⁰ A special kind of leaf picture is the leaf scape. Collect and press a variety of leaf shapes. When they are partially dry they may be arranged on construction paper as though each leaf was an individual tree to make a leaf scape. When properly arranged, hold with pins and spray or spatter paint colors to indicate the background. Allow that to dry. Carefully remove the leaves. The leaf shapes may now be painted or stenciled to appear as though they are individual trees.

Crayon etchings. Autumn leaf designs are successfully made using crayon etchings. Using a considerable amount of pressure, color the background paper with brightly colored crayon. The paper used as the background may be white drawing paper, but because of the pressure used in applying the crayon, a heavier paper such as manila tagboard is more satisfactory. After completely covering the background with a solid or multi-colored layer of crayon, a dark layer of color such as black or purple should be applied. The media used for this layer may be another layer of crayon, or India ink, or tempera paint. It may be necessary to add liquid soap to the tempera paint in order for it to adhere to the waxy background. If ink or paint is used, it must be allowed to dry before beginning the etching process. After covering the background, trace the outline of a leaf on this paper. Using a variety of utensils, the dark covering is removed by scraping or

⁴⁰Kenneth R. Benson and Carl E. Frankson, Creative Nature Crafts (Englewood Cliffs: Prentice-Hall, 1968), p. 71.

scratching to expose the brighter colors underneath. Encourage experimentation with a wide variety of etching utensils, but finger nails, fingernail files, dried ball-point pens, the metal portion found on the end of a pencil, and even tongue depressers work quite well.

Mock ancient leaf designs.⁴¹ Trace a leaf shape on a desired piece of drawing paper. Within this shape small circles are made to touch each other, but not to overlap. These circles may be made with colored pencils, crayons, or ink pens, but probably the most effective and the most fun for the children are the fine line marking pens. This design may be left as it is, or after completing the interior of the leaf a background may be added. This may be completed by designing the background with straight lines, or by using a different color and larger circles than those used within the leaf shape, or by following the design of the original leaf shape.

This activity may be modified by tracing several overlapping leaves and changing the colors of the circles each time the leaves intersect. This particular activity will have enough design within; therefore, it is recommended to leave the background plain.

Crayon resists. Autumn leaves may be brightly colored with crayon on tagboard or other heavy paper. Students may design their own autumn leaf after either drawing or tracing its outline on the desired paper. After completely coloring the leaf, the entire picture may be covered lightly with a wash consisting of tempera paint diluted

⁴¹Robbins, pp. 30-31.

with water. The waxy coating of crayon will resist the tempera wash.

Rather than doing only one or two leaves on a picture, older children may wish to design a complete tree or a branch. Also trunks and branches may be drawn and then the entire areas colored to represent the autumn leaves.

Leaf people or animals, drawn on white drawing paper, may also be colored in this manner and then painted with a tempera wash to make exciting crayon resists.

Tissue leaf rubbings.⁴² This activity requires fresh leaves having well-defined veins. Place the leaf on a flat working surface with the veined side up. Over the leaf place one piece of tissue paper in an autumn color. Using a piece of brown crayon, make a crayon rubbing. Continue this procedure until there are five or six leaves of different hues. Tear out the leaf shapes carefully. Paint a piece of white construction paper with liquid starch and position the leaves. Cover each leaf with more starch before placing the next leaf into position. Encourage the overlapping of leaves.

Autumn leaves from tissue.⁴³ Arrange brightly patterned autumn leaves on oak tag paper and glue in position. Place colored tissue

⁴²Jenean Romberg and Miriam Easton Rutz, Art Today and Every Day: Classroom Activities for the Elementary School Year (West Nyack, New York: Parker Publishing Co., 1972), p. 34.

⁴³Mary Harvey and Martha Woodward, Holiday Art and Displays (Dansville, New York: Instructor Publications, 1970), p. 7.

paper over the leaves. If more than one color of tissue is desired tear the paper for a softer line. Using diluted white glue and a wide paint brush, cover the pieces of tissue paper. If necessary the addition of crepe paper or construction paper may give the desired effect.

Facial tissue collage.⁴⁴ Small leaves which have been pressed combined with facial tissue make an interesting front piece for a card. Using a mixture of one part water and one part glue, paint the entire card including the leaves. Using one sheet of a double facial tissue cover the wet glue on the card. Paint the glue and water solution over this tissue. Allow this to become partially dry and then press it between papers to remove the wrinkles. A precaution against sticking to the paper is to use waxed paper directly over the glued portion. When dry, the greeting on the card may be completed.

Tissue plaques. Tissue may be used as an overlay to make wall plaques. Using dried, pressed leaf specimens, outline the veins of the leaves with felt-tipped marking pens. Glue this outlined leaf to the bottom of a plastic foam meat tray. Paint the tray with glue and place a sheet of light colored tissue paper over this and press it into the glue. Dry and use this as a wall hanging.

A variation of this activity combines two or three sheets of torn light-colored tissue paper for a more colorful effect.

⁴⁴James W. Perrin, Jr., "Five Craft Ideas" Highlights for Children, August, September, 1975, p. 45.

Wax leaf collage.⁴⁵ Collect and press a variety of leaves. After the leaves have dried for two or three days place them on one layer of waxed paper. Scrape crayon shavings over the leaves. Glitter may be sprinkled over the leaves and shavings before covering with a second sheet of waxed paper. This may now be ironed allowing the wax to melt into the leaves. This collage may now be pasted on the window for a colorful decoration.

Leaf collages on metal.⁴⁶ Collect and press an interesting assortment of leaves. After they are dry cover a small section of a can with glue recommended for use on metal. Place the leaves on the glued area. Allow the leaves to overlap. Continue working in small sections until the can is completely covered. Allow this to dry. When the can is thoroughly dried it may be sprayed with clear acrylic. This makes a delightfully decorated container, especially when completed with leaves in autumn colors.

Leaf wall hanging.⁴⁷ Collect and press plant stems, leaves, and flowers until they are dry. Glue the dried specimens on white paper. Cover this white paper and the dried materials with Chinese rice paper, fastening it with glue. Re-press the entire picture until

⁴⁵Phyllis Fiarotta and Noel Fiarotta, Sticks and Stones and Ice Cream Cones: The Craft Book for Children (New York: Workman Publishing Co., 1973), pp. 64-65.

⁴⁶Apple, p. 66.

⁴⁷Benson and Frankson, p. 43.

it is dry. Trim it to the desired size and mount.

Checkerboard leaf design. Begin by covering a nine by twelve inch piece of white or buff colored drawing paper with one inch squares. Choose an interesting leaf shape and trace its outline toward the center of this paper with no regard for the individual squares. For autumn suggest that warm colors be used for the leaf itself, and cool colors for the background. After selecting three warm colors and three cool colors, the individual squares within the leaf may be colored or painted using the warm colors, in checkerboard fashion with different colors being placed next to each other. Similarly, the background is completed using the three cool colors. This is a particularly good lesson in the mixing of water colors for older children. Younger children gain experience in using color in a particular pattern, and if using tempera paints and brushes, they gain more control in the use of applying the paint with brushes.

Painting leaves. It is possible to use only a paint brush and paint to paint the basic shapes of leaves. Narrow leaves are painted by beginning at the base of the leaf, allowing the point to follow the center of the leaf and leave the paper at the tip of the leaf. When it is desirable to paint wider leaves the point of the brush follows the center of the leaf from the base to the tip. This will complete only one side of the leaf. To complete the other half it is the easiest to completely turn the paper and do the remainder with a reverse stroke beginning at the tip. In painting a detailed leaf such as the maple or oak, it is wise to begin by drawing the outline

of the leaf including the principal veins. When painting the leaf, follow each vein as is done when painting a wide leaf as described above. For a complete explanation with illustrations of the procedure including the various types of brush strokes refer to Collect, Print and Paint from Nature.⁴⁸

Leaf and tree pictures. On a paper plate paint the shape of a particular tree, such as a maple, birch, poplar, or oak. On this picture attach a leaf from this particular type of plant. The leaf may be either pressed or waxed to preserve it. To allow for a three-dimensional effect, this leaf may be affixed by the use of the "paper spring" constructed by simply folding two thin strips of paper which were fastened perpendicular to each other at the start. The plate may then be covered with clear plastic. If desired a paper frame may be added.

Leaf Mobiles

Using a variety of procedures several different types of leaf mobiles may be created. One possibility is to divide the children within a given classroom into groups and each group may construct their own mobile.

Construction paper mobiles. A simple leaf mobile for very young children to design is made by cutting a variety of leaf shapes and sizes from construction paper of assorted colors. String of vary-

⁴⁸John Hawkinson, Collect, Print and Paint from Nature (Chicago: Albert Witman and Co., 1963), pp. 10-15.

ing lengths is then fastened to the leaves. Suspend them from a supporting frame in an irregular placement. Interesting frames for leaf mobiles include the use of branches.

Translucent mobiles. Translucent leaf mobiles may be made by using heavily waxed, waxpaper covered with crayon shavings melted by the means of a warm iron. If heavily waxed paper is unavailable, it may be necessary to press the crayon shavings between two pieces of waxed paper. When this paper cools the leaf shape may be cut from the paper and suspended by string or elastic near a sunny window.

A very similar procedure as above may be employed, with the exception that the clear plastic type of paper be used. In this case crayon shavings are arranged on one layer of clear plastic and then are covered with a second sheet. When ironing these together it is necessary to use an ironing cloth to prevent this delicate paper from affixing to the iron.

Crayoned-paper mobiles. Combining the techniques found separately in the previous paragraphs other mobiles made from leaves may be designed. Harvey⁴⁹ suggests cutting leaf shapes from colored construction paper. To these shapes add crayon shavings and cover them with waxed paper. Press this with a moderately hot iron. It may be left as it is, trimming away the excess waxed paper, or the waxed paper may be removed immediately to design a more vividly colored leaf. These shapes may be hung as mobiles, or displayed on a large tree shape on

⁴⁹Harvey and Woodward, p. 7.

a bulletin board, or hung on a three-dimensional tree.

Fabric mobiles. Another effective fall idea is to use scraps of colorful fabrics to cover both sides of heavy paper such as tag-board. From the fabric covered paper, cut leaf shapes. Fasten string to each leaf and suspend from a small branch.

Cellophane leaf hangings.⁵⁰ To make cellophane leaf hangings use leaves or leaf patterns, tracing the shape of the leaves on construction paper. Cut these leaf patterns out and arrange them on either clear or colored cellophane paper. When satisfied with the arrangement glue it to the cellophane background. Seeds for the particular type of tree may be glued into position to add interest to the design. The top edge of the cellophane is then folded approximately one-half inch over the bottom of an ordinary wire clothes hanger. This must be glued firmly in position. Using black paper paste a one inch strip on both the top and bottom of the hanging on both sides. This may be hung as a mobile from the ceiling or a light fixture.

Paper mache mobiles. Leaves for mobiles may be made from paper mache. This activity requires approximately six layers of paper to be used in the formation of mache by applying a wheat paste mixture. While this mache is still damp a leaf shape is cut from the paper. It may be formed, or bent to resemble the leaves as found in nature; braced in that position, and left to dry. After it has dried for

⁵⁰Robbins, pp. 20-21.

several days it may be painted to resemble an autumn leaf. The finished leaves will be much more attractive if the original paper was white and plain rather than the newspaper so often used for paper mache activities. Suspend the leaves from the desired frame for a classroom mobile.

Tissue mache mobiles. Tissue paper may be used in a manner similar to the paper mache leaves described above. Autumn leaves may also be made by using a solution of water and white glue to overlap related colors of tissue paper. To accomplish this without the tissue adhering to the working surface it would be beneficial to work on waxed paper. A brush may be used to apply the glue solution or the paper may be dipped carefully and quickly into a pan containing this mixture. After three or four layers are formed this may be set aside to dry thoroughly. After this dries, leaf shapes may be traced, or in the case of older children, designed free hand, and suspended by a string from the desired frame.

Leaf Identification

It is a worthwhile activity for school age children to collect various types of leaf specimens for leaf identification purposes. After collecting and identifying the leaves the edges may be traced or their shapes may be printed by one of the suggested methods.⁵¹ If the leaf itself is to be used for identification it should be preserved

⁵¹Refer to "Leaf Printing", pp. 30-40.

by pressing.⁵²

Following are several ways to use leaves or their prints for identifying their basic shapes.

Outline. Trace the outline of the leaves in a desired media; such as: pencil, crayon, or felt-tipped markers, on paper. It may be cut from this paper and mounted on a contrasting background.

Silhouette. Hold the leaf securely in place on a desired background. Using crayons, paints, or chalk make a silhouette shape by applying the color beginning on the leaf and working to the background.

Veined picture. Using the side of the crayon, rub in one direction on a piece of paper placed on top of the veined side of the leaf to indicate the entire leaf shape.

Waxed. Press dried leaves between two pieces of waxed paper.

Pressed leaf booklet. Glue pressed leaves to white paper and cover each page with clear plastic. Bind the pages together to form a book for later use.

Pressed leaf display. Glue pressed leaves to a cardboard backing and spray with a preservative.

⁵²Refer to "Pressing", pp. 18-21.

FLOWERS

In addition to the activities found under the division of leaves, there are those which are especially attractive with the use of flowers; either independently or in combination with any of the other forms of foliage.

This portion of the handbook will involve activities emphasizing flowers. These specimens may be often found in fields and meadows; along the wood or garden edge; or if not totally destroyed by sprays, along a roadside or highway. These forms of nature, too, have a color, a texture, a shape and often a distinctive fragrance, enhancing their beauty. These flowers then, are not to be neglected, but sought after, to be used in art and craft activities.

Flower Pictures and Plaques

It is possible to make a great number of creative plaques or pictures to be used for wall decorations depending upon the selected flower specimens, the chosen background, and the creative use of the imagination. Do not neglect to use other products from nature such as: leaves, pods, seeds, cones, pieces of driftwood, and a variety of grasses and ferns, in combination with the flowers for truly creative arrangements.

Flower wall plaques. The background for a striking flower wall plaque may be a piece of thin wood. It is often desirable to leave it in its natural state, but it may be sanded and stained or lacquered.

Begin by experimenting with various types of floral arrangements to compliment the background to which it will be affixed. To experiment, a piece of cardboard of the same size as the board may be used. Experiment with various basic designs carrying out what the larger more prominent pieces may suggest. Use oval or L-shapes, fan or V-shapes, or crescent or diagonal shapes. Begin with the larger pieces and later add smaller pieces for more detail. An example may be to begin with a larger flower with grasses radiating from it, and small cones or other seeds added for contrast. After discovering a pleasing arrangement the pieces may be glued onto the board beginning with the larger pieces as in the original planning stages. When completed a hanger may be added and it is ready for display.

A similar variation of the above is to use burlap, velveteen, or another type of heavy material or mat as the background. In this case, if possible, use a thin piece of wire to attach to the back of each natural product and wire it through the material background, fastening it on the reverse side.

In considering an activity such as this for children in the elementary grades guidance must be given by the instructor. Encourage the children to experiment with a variety of arrangements and materials, and to use glue sparingly when affixing the natural materials to the background.

Flower plaques on plastic lids.⁵³ Plastic lids such as those

⁵³Gould, pp. 95-99.

found on the top of coffee cans may be used to design flower wall plaques. Begin by painting the inside of the flat portion of a lid and both the inside and outside of the lid rim. This must dry thoroughly before being lacquered. On the inside of this lid a lace doily, cut to the correct size, may be placed and affixed. This doily may have the very center removed to show more of the colored background if desired. The flower is then glued to the center of the lid. Afterward glue a piece of clear plastic to the very edges of the lid to protect the flower specimen. If the flower specimen is one which is pressed flat, it may be easier to cover the plaque with a clear self-adhesive plastic.

More than one of these covers may be fastened to a ribbon and hung vertically as either a wall hanging or a mobile.

Flower plaques from phonograph records. Old shellac phonograph records may be used as a background in creating flower wall plaques. To cover the center label of the record arrange and glue nature's dried flowers. Grasses may be added around the center arrangement adding a delicate, lacy appearance to the plaque.

It is also possible to begin the design with grasses and ferns arranged from the center of the record in a radial design, with the tips at least one inch from the record edge. Dry this arrangement thoroughly. If desired, a second layer may be arranged on the outside of the first layer using shorter materials. After allowing this to dry, other nature products such as cones, nuts, and seedpods may be used to conceal the record label and to design the "hub" for added interest.

The record color itself may be changed by painting it before beginning to add the dried materials. It is also possible to add color to the dried material after it has been arranged and allowed to dry on the record. Water color applied lightly may enhance the faded color of this dried material. If desired, the record and the arranged materials may be sprayed a solid color after it has been allowed to dry. If no color is added, a clear lacquer that will adhere to plastic will help to preserve the plaque.

Framed flower pictures. Pressed flowers may be arranged into pictures by covering a piece of cardboard, with its size determined by the choice of picture frame. The covering for the cardboard may be of either a heavy paper cut to the same size as the cardboard, or a heavy type of cloth such as linen, velvet, or burlap. Cut material larger than the cardboard and fasten the additional material in back of the cardboard with adhesive tape. Using pressed flowers and foliage, arrange a pleasing design with the dark, larger flowers toward the middle and bottom of the picture as in a bouquet. Place the dried and completed arrangement in a frame under glass to make a complete picture and to protect the pressed specimens. A more desirable end product results if the flowers do not touch the glass.

Waxed paper flower pictures. Arrange pressed flowers on a piece of waxed paper. Cover this with another sheet of waxed paper. These papers will adhere together if pressed with a moderately hot iron, but guard against ironing the flowers themselves. Now the waxed paper may be cut into the desired shape. This may be placed within a frame or a frame may be designed from construction paper.

Paper plate flower pictures. Young children may enjoy creating a picture by gluing flowers to a paper plate. Purchase colored paper plates or select a color with which to either paint a plate or cover it with construction paper. Affix a pressed flower with glue to the center of the plate. Clear plastic may be pulled tightly over the front of the paper plate picture and fastened in back with tape for added protection.

Flower plaque bouquets. To design flower plaque bouquets the same procedures for dried pressed flower and leaf plaques are used with the exception of allowing room for and planning the design of a vase. An effective vase may be completed by covering it completely with seeds and covering this with a clear self-adhering paper. Arrange flowers to fit into the vase leaving a border around the outside edges. Keep in mind the basic principles in flower arranging, the darker, larger flowers receiving the special prominent positions with the lacy, pale materials filling the picture toward the borders.

Laminated Flower Activities

Laminated leaf and flower activities may be used for decorative purposes, or for practical items such as: place mats, coasters, or napkin rings. There are several combinations of materials which may be used in laminating which give a variety of effects. Materials that are often used are: clear plastic, self-adhesive clear plastic, colored or facial tissues, and waxed paper.

Plastic wrap laminations.⁵⁴ Plastic wrap laminations may be made by placing a large piece of plain, not printed, paper on the ironing board. Add four pieces of plastic wrap, and position leaves or flowers as desired, but allowing room between the specimens for sealing to be effective. Cover the leaves and flowers with an additional four pieces of plastic wrap and cover this with plain paper. Using a low setting, iron over the top paper. Remove this plain paper and allow the plastic wrap to cool. If individual laminated leaves or flowers are desired, cut them apart leaving a border of at least one-half inch. If round circular laminated leaves are desired to be used as a coaster it is more desirable if there is a wide margin of plastic around the leaf.

Laminated placemats.⁵⁵ Pressed leaves, flowers, ferns, or grasses may be made into placemats by using a backing such as construction paper, or plain purchased placemats. Arrange the dried materials in a pleasing pattern and cover it with a sheet of self-adhering plastic which is cut larger than the size of the backing. Press the plastic firmly into place and apply another piece of clear self-adhesive backed paper on the back side. Press this down firmly and trim it leaving a border of at least one-fourth inch around the entire mat to assure proper adherence.

Tissue laminations.⁵⁶ An interesting nature picture may be

⁵⁴"Laminated Leaves for Fall," Pack-O-Fun, October, 1974, p. 43.

⁵⁵Gould, pp. 105-107.

⁵⁶Epple, pp. 61-62.

developed by using leaves or flowers and covering them with facial tissue. Begin by ironing a single piece of facial tissue to remove any creases. Plan an attractive arrangement of nature's forms on a piece of waxed paper about the size of facial tissue. When an arrangement is satisfactorily designed coat the waxed paper with a mixture of one part Elmer's glue and one part water. Very carefully place the pressed materials onto the glue mixture while it is still wet. Immediately cover the design with the tissue. Using the side of a brush, carefully pat the tissue to wet it entirely with the glue mixture, working from the center to the outside. When this is dried place it between two pieces of paper toweling and iron the arrangement with the iron set on a low setting. This will turn the tissue and waxed paper into a parchment-like piece of paper. This may be framed with a piece of construction paper for display.

Another form of tissue lamination, as described by Crane,⁵⁷ is to arrange the dried materials on one thickness of facial tissue, preferably with one type which maintains its strength while wet. Tear the edges if more than one piece of tissue is required to avoid distinct edge marks. Using thinned white glue, made of one part glue and two parts water, dab the tissue gently with a paint brush. Continue adding layers of facial tissue to add depth to the composition. If one part in particular is to stand out it may be placed just before the last layer of tissue is applied or on top of the last tissue.

Special effects may be obtained by tinting the glue with paint,

⁵⁷John Crane and Diane Crane, Scrap Craft (Dainsville, New York: Instructor Publications, 1963), p. 15.

or by using colored tissue. Also other types of art media such as India ink, paint, or cut figures may be used with the laminations.

If the laminations curl, place them between pieces of waxed paper and weight them down.

Waxed paper creations. Pictures may be made by using pressed flower specimens and covering them with waxed paper. Arrange two or more flowers on a piece of waxed paper cut to the proper size. Cover this with another sheet of waxed paper. Using an iron at a low setting, press the two pieces of waxed paper together, but do not press over the flowers. This may now be framed in a frame or it may be glued to a piece of colored construction paper.

To make an imaginative picture, ferns and leaves may be arranged on a sheet of waxed paper. Flower petals are used to resemble some other form such as: birds, animals, fish, or insects; or they are placed together to represent people, and are arranged on the paper. Now cover the arrangement with a second sheet of waxed paper and iron from the outside edges to the outside of the flowers and leaves. Trim and mount for a complete imaginative creation.

Pressed flower transparencies.⁵⁸ To make a pressed flower transparency begin by collecting and pressing small varieties of flowers and leaves. Cut from clear self-adhesive backed paper two six inch circles. Remove the paper from one of the circles and arrange

⁵⁸Arden J. Newsome, Crafts and Toys From Around the World (New York: Julian Messner, 1972), pp. 50-51.

the leaves and flowers in a pleasing manner with some of the materials face up and others face down. After the flowers are arranged, place the second piece of clear self-adhesive backed paper with the sticky side down to cover the first one. These may be pressed firmly together with the fingers. Using plastic tape, cover the edges of the flower transparency. From a hole punched in the top, thread ribbon and tie a bow. These pressed flower transparencies may be used on various types of mobiles or even as ornaments for the Christmas tree.

Assorted Activities Using Flowers

Besides using flowers for processes such as designing pictures or composing laminations they may be used in a variety of other ways. This section of the handbook includes such creations as: notepaper, bookmarks, additional picture ideas, flower dolls, and paperweights; various other activities including: making sachet, potpourri, and flower beads; and a general introduction to arranging flower bouquets.

Notepaper designs. Small, delicate, pressed flowers may be used to design greeting cards or notepaper. After selecting the appropriate paper, the flowers may be affixed with a clear drying, fast setting glue. In the case of very fragile and delicate flower specimens it may be desirable to use tweezers in handling and arranging them.

Bookmarks. Bookmarks made using dried flowers and grasses are very attractive and yet fun for children to design. Supply construction paper the desired size. Allow the children to select their own colors and pressed flowers to be used. Paste the flowers in the

desired positions and allow to dry. Later cover both sides with a clear adhesive-backed paper. The most simple method of doing this is to place the construction paper face side down onto the adhesive-backed paper, cut out and repeat on the opposite side and trim. If desired a cord or ribbon may be attached to the top.

Epple⁵⁹ suggests a bookmark similar to that described above with the exception of the construction paper. For this bookmark cut a piece of the clear plastic self-adhesive the desired size. Plan on the types of materials to be used and their arrangement. When the desired arrangement is made remove the backing from the paper and place it sticky side up. Place the flowers face up onto the clear adhesive and press down into place. Then place a second sheet of the clear adhesive over the first, sticky side down, with the middle touching first and working toward the ends. It may be helpful if the second piece were a little larger than the first and later trimmed to the correct size, as exact placement is difficult. Using a straight edge as a guide, draw a line with waterproof, instant, drying felt-tipped pen around the entire outside edges of the bookmark.

Tissue and weeds collage.⁶⁰ Collect and dry a variety of long, thin, feathery weeds. To begin the tissue collage cut, or preferably tear, several squares of colored tissue paper into various sizes and shapes. Then paint a white paper with a mixture of one part water and

⁵⁹Epple, p. 64.

⁶⁰Romberg and Rutz, p. 38.

one part white glue. Place tissue paper on the glue designing a landscape. Cover each piece of tissue with the glue mixture. Arrange the dried weeds in a pleasing arrangement over the tissue. Again put the tissue pieces over the top of the dried weeds and cover thoroughly with the glue solution, adding several layers of tissue.

Weaving weeds.⁶¹ It is possible to use weeds when weaving.

It is best to select weeds that dry naturally in the field, but choose specimens that are not completely dried as they will break too easily during usage. Collect tall grasses and flowers that are at least six inches in length. Using the lid of a shoebox, cut notches at the ends at one-half inch intervals. Wrap string or yarn around the box using the notches as guides. Weave the weeds in and out of the strings. Other materials such as yarn, ribbon, or rope may be added for color and interest.

Flower dolls. It is possible to make fresh flower dolls, but they are not long lasting. It is also practical to make flower dolls from dried specimens, but this would be too difficult to try as a project for an entire class. Possibly a few students in the upper grades could handle this as a spare time activity if they have such a desire.

Cutler⁶² suggests the use of a corsage pin or toothpick to join together two crab apples to form a head and body for a doll. A large

⁶¹Romberg and Rutz, p. 70.

⁶²Cutler, pp. 28-29.

flower may be pinned to the bottom for a skirt, while a small flower makes a hat. Arms may be pinned to the body using a flower such as a columbine. The face may be drawn on the head with a pin, or a fine-line permanent marking pen.

A doll made of hollyhocks is easy to construct by using one flower placed upside down. Facial features may be painted on the calyx, or sepals, found at the base of the flower. Tie a ribbon below the calyx to resemble a neck. The large portion of the flower resembles a skirt. Place this hollyhock blossom over one or two more for an even fuller skirt. A hat may be added either from cut colored tissue paper or felt, or by adding another type of flower.

Laury⁶³ offers another variation of the hollyhock doll by using an inverted hollyhock as a doll with the calyx forming the bodice and the blossom the skirt. The head may be a bud held in place with a toothpick. Leaves or even two sepals extended outward from the bodice may be used to resemble the arms.

Framed three-dimensional flowers. Three dimensional flowers may also be framed, but in this case it is best to use a frame with a convex glass. Choose interestingly shaped flowers which are not too large, such as pansies or daisies. Arrange the flowers and the accompanying greenery and fasten them with glue to a cardboard backing, which may have been covered with a desired background. Place this arrangement in the frame, guarding against the flowers being crushed

⁶³Jean Ray Laury, Doll Making: A Creative Approach (New York: Van Nostrand Reinhold Co., 1970), p. 21.

by the glass.

Flower shadowboxes. The above idea may be more successfully completed in the classroom setting by selecting the three-dimensional flowers and arranging them to make a shadowbox or diorama. After selecting a shallow cardboard box, design and paint a background. On what is to be the bottom of the shadowbox, affix several lumps of modeling clay. The stems of dried flowers, ferns, and grasses are then arranged in the clay base. Other nature products such as tiny stones, shells, mosses, or leaves may be added to conceal the clay base. Purchased miniature animal figures may also be used for additional interest. To protect this arrangement cover the front with clear plastic. The plastic may be stretched over the front and sides and fastened in the back with tape. If the plastic is fastened on the sides, complete the shadowbox by covering the sides and back, by gluing construction paper in place.

Flower and foam creations.⁶⁴ Flowers, dried weeds, or even weed stalks and seeds may be used to design animal creatures along with plastic foam. Foam pieces may be joined with twigs or sturdy stalks from plant life. The flowers, weeds, or seeds may be pushed into the plastic foam to add features to the basic animal design. These features may include wings, tails, body coverings, and any other desired characteristics.

⁶⁴Marianne Seehafer and Sandra Seehafer, Easy Crafts for the Classroom (Dansville, New York: Instructor Publications, 1974), p. 14.

Paperweights.⁶⁵ Paperweights using flowers is another activity which the upper grade children may enjoy. For this project it is necessary to purchase either glass furniture coasters or glass paperweights. Those paperweights which magnify are more difficult to use, as the working area is so small. A base for the paperweight may be made from cardboard or stiff paper, covered with either paper, material, or paper doilies. The cardboard base may be cut to the proper size by tracing around the bottom side of the glass. The material to cover the cardboard is glued to the cardboard. Now glue the flower to the centerbase of the paperweight so that when placed under the paperweight glass it will fit properly. After this glue dries thoroughly for twenty-four hours, it may be necessary to secure the seal by applying more glue to the outer rim of the backing and the glass. Dry this thoroughly before rehandling.

Sachet. To make a sachet collect flower petals before they are past their prime blooming time. Some flowers that may be used are roses, sweet peas, or geraniums. Dry the flowers by either spreading the petals on newspaper, or by hanging them upside down by their stems and removing the petals after they have dried. Use these dried petals as a perfumed powder contained in a bag to be placed in closets or dresser drawers.

One type of bag may be made by using a pastel colored satin ribbon, three inches wide and twelve inches in length. Fold it over

⁶⁵Gould, p. 83.

once to make a rectangle three by six inches. Stitch the sides with an allowance for a three-quarter inch hem at the top. This hem is to accommodate a satin ribbon which may be pulled through to close the bag.

Another type of bag which may be made is one from silk or gauze, making certain that there is enough thickness to retain the dried flowers. After the bag is filled with the desired type of sachet powder, it may be tied securely with a ribbon.

Potpourri. Potpourri is a mixture of dried flower petals; or dried flower petals and spices, used to add fragrance to closets, cupboards, or dresser drawers.

Begin by collecting petals of sweet-smelling flowers that are at their peak of bloom. Some of the common varieties that may be selected are: roses, violets, carnations, pinks, and lilacs. In addition to flowers, sweet-smelling herbs may be used. After the flowers are gathered it is necessary to thoroughly dry them. One method which is convenient is to lay them on a screen, that is supported up in the air, in order for the air to circulate freely from the bottom as well as the top. Another method is to place them in a shallow box or tray and stir them gently each day for about two weeks.

After the flowers are thoroughly dry they may be gathered to be placed in their respective places. If it is to be used in a drawer it may be wrapped in a thin cloth, which may also be covered with nylon netting. If it is to be placed on a shelf, it may be left in an open container or one which is covered, but has the top punctured for the fragrance to escape.

Another type of potpourri may be made with rose petals. Nagle⁶⁶ suggests allowing them to dry in a large open box, sprinkling salt over them to remove additional moisture. After two weeks in which the petals have been occasionally stirred, mix in cinnamon, allspice, and cloves. This mixture may be allowed to dry for several more days with frequent stirring. In addition to the above mentioned spices, Gould⁶⁷ recommends the addition of ginger and nutmeg with all five types of spices totaling one ounce plus one ounce of ground orris root per quart of petals. He suggests stirring this mixture at least three times during a week. Between stirrings it is to be kept tightly covered and stored in a glass jar.

After allowing this mixture to combine the various scents it is ready to be placed in the proper containers for usage.

Flower beads.⁶⁸ Flower petals of roses or any other flower with a pleasing fragrance are chopped very fine while still fresh. Place them in a metal container for one week. If they show signs of becoming dry sprinkle a little water over them to keep them moist. After one week add water and mix it until it becomes a soft mass. Using this mixture, make small balls by rolling it between your thumb and index finger. Push it onto a knitting needle or a piece of wire to maintain a hole for stringing and allow it to dry.

⁶⁶Nagle and Leeming, p. 59.

⁶⁷Gould, p. 85.

⁶⁸Nagle and Leeming, p. 63.

Rose petal beads.⁶⁹ Another way of making rose petal beads is to crumble three cups of rose petals between your hands and then cut the petals into small pieces. Add small amounts of water to flour in a bowl until it makes a firm dough. Knead the rose petals into the dough until thoroughly mixed. Shape little pieces of this mixture into beads. Push a pin through the center of each bead to form the hole. Using another pin scratch the surface of the beads to resemble rose petals. Allow these beads to dry. When they are nearly dry remove the pins from the holes. These beads may be strung to make bead necklaces, or affixed to a backing for matching earrings. The beads which are used for earrings do not need the holes formed with the pins.

Flower bouquets. The blossoms of uncultivated plants found in nature are so often unnoticed, but upon a more careful examination, each has a natural beauty including its particular color and form. The individual beauty of these oftentimes, unnoticed plant specimens may be very well displayed in a flower bouquet.

It must be remembered that several kinds of wild flowers are protected in Minnesota. A complete list is included in the Appendix.

An activity which may be used with children in the upper grades is to gather and arrange a bouquet of their own in the fall of the year. Before the day of a walk, have each child bring to school a container for his bouquet. It may be a vase, a tin can, or a jar,

⁶⁹Nagle and Leeming, pp. 62-63.

which may be changed into a vase in the classroom.

On the day of the walk arrange a discussion and possibly even a demonstration of flower arranging, very generally, but emphasizing basic points such as: the appropriate sizes for different types of vases and the center and base positions given to the large, dark colored, or prominent flowers. In the case of the fan shaped bouquet, those flowers to receive the most attention, or to become the focal point of the bouquet, are located in the center of the arrangement. Also discuss some work with color such as: if the vase is a neutral shade a greater variety of types of flowers may be used. If the vase is brightly colored, more subtle types of coloring in the flowers themselves are desirable, with a possible addition of a figurine located near the arrangement to bring out the necessary color.

On an especially sunny afternoon, the class may go for a nature hike to gather natural dried flowers or grasses. Some examples of plants that dry well naturally are: evening primrose, goldenrod, Queen Anne's lace, mullein, steplebush, and various types of grasses.

Allow each child to pick several stems of nature's plants, but caution them against picking more than they can use. Encourage the children to be aware of textures, sizes, colors, and shapes. When on the trip these characteristics should be considered, as well as that of gathering materials with as long of a stem as possible up to the maximum length needed for their particular vase.

Choose one specimen as the center of interest. It should be somewhat different than the other specimens either in size, color, or form and place it in a prominent location near the middle or center of

the arrangement.

To help hold the flowers in the proper position it would be most helpful to partially fill the vase with sand.

Miniature flower arrangements. Dried floral arrangements of a miniature nature can be used to make an arrangement under glass. A round clear glass jar or a bubble bowl may be used as the glass dome. If the jar has a screw lid, use it, otherwise use a wooden or plastic base for the bottom of the arrangement. Inside the lid or on the base, modeling clay or styrofoam is used to help to hold the dried nature materials in position. To make this a balanced and an attractive arrangement, consider the flower placement as described previously in flower bouquets.

Dish arrangements. Similar to the flower bouquets are dish arrangements. These dish arrangements make use of dried flowers arranged to form a lasting creation. Choose the desired flowers and a dish, jar, or container to fit the selected, available, dried flowers. Using clay as a base, and a desirable covering such as: sand, grass, moss, or gravel; press in the dried flowers. It may be necessary to use a slender stick or long tweezers to push these into the clay. Make an interesting arrangement and display.

Seasonal Activities Using Flowers

Flowers and leaves may also be used in creative art and craft activities for the holidays during the various seasons of the year. These projects may be an added incentive to consider the use of nature's products throughout the entire school year.

Halloween. At Halloween an interesting flower bouquet is made by arranging dried flowers, grasses, and leaves inside of a can or jar hidden inside of a scooped out pumpkin shell.

Robbins⁷⁰ suggests spray painting an eerie scene using weeds for a Halloween picture. Working on a dark piece of colored construction paper, use white tempera paint diluted with water and spray this on the desired arrangement of grasses, flowers, or ferns. Cover the entire paper completely, but not too thickly. When a silhouette shape of the leaves is made stop spraying. After allowing the paint to dry remove the specimens.

Form one facial tissue into a round ball shape to be used for a head. Cover this with a second piece of facial tissue to indicate a ghost shape. The second tissue may be twisted around the head, or a small rubber band may hold it in position. Eyes may be drawn into place, if desired. Add one ghost or more to make the picture more eerie. Crayon may be used to add a bit of color to the picture. Guard against too much color, but a haunted house, a gnarled tree, or a wisp of color may be added among the branches. Mount this picture on gray paper.

With the already partially sprayed specimens Robbins suggests adding another color or two by respraying portions with the spray gun. When thoroughly dry they may be tied with a colorful ribbon or yarn and taken home to be used as a bouquet.

⁷⁰Robbins, pp. 52-53.

Thanksgiving. For Thanksgiving a variety of dried materials may be arranged to form centerpieces, either grouped with other decorative creations, or designed to remain alone.

One example of a nature craft activity is that of using a large pine cone as a body for a turkey and creating tail feathers from naturally dried grasses and flowers. To complete the turkey, the head, neck, and waddle may be cut and made from felt, or even modeled from paper mache and then painted.

Winter. Evergreen branches such as those of balsam, cedar, or pine may be used to arrange bouquets in vases or baskets, especially for the winter holidays. Cones or pods may be added for additional interest or to serve as the focal point of the design. Probably the most important aspect to consider in creating a well-balanced arrangement is to see that the length of the branches is sufficient for the size of the container.

Evergreen branches used in short sprays may also be used to make garlands for the winter season. This is done by winding wire around each spray, securing it to a rope or twine which is fastened to a stationary object to make working with it easier. Keep the stems facing in one direction while fastening them to the rope, overlapping the sprays to cover the stems.

Christmas. With short branches from the evergreen trees, Christmas wreaths may be made. Using a coat hanger formed into a circular shape, cut off the hook portion, and cover the shape with florists tape to discourage the slipping of the evergreens. Use

several little sprays of evergreen pieces approximately five inches long and bind them to the circular shape with wire. Overlap the sprays in order to cover their stems. The longer and the closer together the sprays are, the fuller the wreath will be. It is the easiest to add the sprays with the stems facing the same direction all the way around the circular shaped wire, but it is possible to begin with the stems toward the top on each side and continue toward the bottom until both sides meet. Trim the top with a large, brightly colored bow and hang for an added festive touch.

At Christmastime air-dried foliage and flowers may be transformed into a lovely natural wreath. Cover a styrofoam wreath with naturally dried flowers and ferns. They may be sprayed first or left in their natural state. Begin by covering the wreath with the foliage, later adding the flowers either in a balanced or a random pattern until the desired effects are achieved.

Valentine's Day. For Valentine's Day a valentine decorated with nature's pressed flowers is a special surprise. After cutting the particular valentine shape use glue very sparingly to attach flowers and leaves. These pressed materials may be arranged in a variety of ways on lightweight cardboard, doilies, foil, or construction paper of different hues. To help protect the arrangement clear adhesive-backed plastic or another form of laminating paper may be affixed.

Using assorted sizes of paper hearts as flowers, a special type of bouquet may be arranged for Valentine's Day using evergreens for the foliage.

Easter. At Eastertime dried materials, such as: leaves, flowers, ferns, or grasses may be used as trim for blown eggs. After blowing the contents from the egg, rinsing the shell and drying it, pressed foliage or flowers may be attached with Elmer's glue. Usually the narrower end of the egg is used as the top of the decoration. To position the egg for drying, insert a stiff wire into one of the holes in the egg and let the shell near the other open hole rest on the wire top. The bottom end of the wire may be placed in a container or into modeling clay to be used as an upright support. After the egg dries, spray it with a clear lacquer and allow that to dry. If the eggs are to be used for hanging, such as on pussy willow or other branches, ribbon may be wrapped lengthwise around the egg, covering the holes. An additional amount of ribbon or braid may be used for hanging the egg. If the decorated eggs are to be used for decorative purposes similar to that of being displayed in a basket, the pressed materials should cover the end holes for a more pleasing effect.

Vacation remembrances. A different and pleasant way to remember a vacation is to gather some of the leaves and flowers which are different than those that are native to the area in which you live. Press them in an old telephone directory and bring them home. They may be arranged for a wall plaque, or framed as a picture, or made into a bookmark.

Nature's Living Specimens

In considering the use of flowers and leaves in art and craft activities, nature's living plant specimens are not to be neglected. Fresh flower bouquets may be used as ornamentation in the classroom

as well as to exemplify the various types of flowers and their respective parts such as: petals, sepals, pistils, and stamens while discussing plants in science classes.

Terrariums. At the present time plant terrariums are quite popular. Terrariums are collections of tiny plants growing in soil in a clear glass container to resemble a miniature garden. Using nature's products to design your very own terrarium may be a clever idea or a unique gift. These may be arranged with living plants when there is no snow on the ground. Spring and fall are the most ideal times to begin your terrarium.

If the type of terrarium desired is of fresh greenery for a wintertime arrangement fall is the ideal time to collect the material.

On an excursion into the woods collect a very tiny evergreen seedling, approximately two inches tall, or a miniature fern, or any other desirable plant specimen, or a combination of these, considering the size of the container into which they will be transplanted. Also gather moss, and if desirable for added interest, lichens, a small interesting stone, or a little piece of bark may be added.

In considering the container into which these are to be placed, many varieties are possible. Some examples may be glass jars, fish-bowls, goblets, candy jars, or nearly any other clear glass container. It is most desirable that these containers have a clear glass cover, but if it does not clear glass may be used, or a covering of a clear piece of plastic fitted with a rubber band will be a sufficient improvisation.

Arrange moss on the bottom of the container and the sides with the green side facing out. Gravel and charcoal may be placed on this layer of moss for good drainage and sweeter soil respectively. Then add a layer of good top or garden soil.

The plants may then be arranged in the soil. If desired, the top may have some moss or other articles of interest added to it. Spray this lightly with water and cover the top.

If there is too much water the sides of the glass will become beaded with moisture. In this case, remove the cover and allow the extra moisture to evaporate. Remove the cover and water the terrarium once a week. Display the arrangement in a light, cool, place; away from the direct sunlight.

If the annual summertime flowers are desired to complete a miniature indoor garden, then begin early in the spring. In this case, select specimens of small varieties of plants and plant them carefully, as described above, allowing for their growth.

Dish gardens. Very similar in nature to a terrarium is a dish garden. A dish garden is a terrarium, but in an open container. In this arrangement, both shorter and taller plants may be used, but allow enough room for their growth.

Garlands. Picked fresh flowers, rather than those which have been dried, may be used in creating garlands.

Children may wish to make a garland for a special occasion. One way of making a flower garland is to gather a variety of flowers and cut their stems about three inches long. After placing the stems in water for some time in order to remain fresh for a longer period of

time, they may be tied into little bunches and placed in water until all of the bunches are tied. Then using a heavy string, fastened securely at one end for more ease in working, the little bunches may be overlapped and wound around the heavy string. Little bunches of greenery may be wound intermittently or if the flower supply is limited, the garland may be made using more of the greenery with flowers added occasionally for accent.

A second type of garland may be made using leaves of the same variety and approximately the same size. The leaves should also have strong stems which may be used as fasteners. Lap one leaf partially over the one next to it and fasten them together by using the stem in a vertical position, pushing it through on the back side of the leaves and returning it back through the front to the back side again. When the garland is of the desired length the first and last leaves may be fastened together. Flowers may be added by inserting their stems under the fastener on the front side of the leaves.⁷¹

Another type of garland that may be made is the one children often try on their own after they learn how to braid. Start by selecting three flowers with stems of different lengths and braid the stems together. Good choices of flowers for this activity are daisies and long stemmed clover blossoms. When one stem becomes too short add with it another flower and continue in this manner until a chain of the desired length is completed. The two ends may be joined inconspicuously with a fine wire, string, or thread.

⁷¹Nagle and Leeming, p. 41.

By using only the heads of flowers such as daisies and a needle threaded with a long string, another type of garland may be made. To make this type of garland the center of each flower head may be pushed over the needle and to the end of the string which should be fastened to something or with a knot so they will not slide off the string. Continue adding more flower heads until the desired length is attained. Tie the two ends together if a circular type of garland is desired, or knot both ends if it is to be used as a chain.

Chapter 5

SUMMARY

Nature offers an extensive supply of products attracting the attention of children. It is with this fact in mind that this handbook was developed, to use nature's leaf and flower materials as a resource for art and craft instruction in elementary classrooms.

This handbook will allow classroom teachers to have one available source using leaves and flowers rather than relying on memory, or searching for ways to use these nature products for art and craft activities.

This handbook is limited to art and craft activities involving the use of leaves and flowers in order to make a more complete study in that area, rather than a superficial coverage of activities involving more of nature's products.

Generally speaking products found in nature are readily available and inexpensive, often times already captivating the interest of school age youngsters.

To use leaf and flower materials allows children to become more familiar with the natural environment. They become acquainted with the names of plants, the structure of plants, and varieties of plants such as deciduous or coniferous, and those plants protected by the State of Minnesota.

Using a variety of materials, such as crayons, water colors, chalk, tempera paints, waxed paper or tissue, children become more knowledgeable. This knowledge is not only in the form of vocabulary and recognition of the media, but also a knowledge in appreciation of what may be expected of a particular material. Children also learn a variety of procedures such as: collage, laminating, printing, rubbing, and stenciling.

In the case of crayon, children also learn and perfect a variety of techniques such as those of: ordinary coloring, using the side of the crayon, intense pressure, melting crayons, line variations, pointalism, cross-hatching, or the resistancy of crayon to other art mediums.

With the use of paints children also learn and develop new techniques such as those of: wet and dry brush, blending, dabbing, dripping, spattering, and stippling colors.

Flowers and leaves may be used as gathered, or they may be preserved and stored for future use. These processes are explained to help classroom teachers use only two of nature's wonders to create many varieties of design.

The leaf and flower art and craft activities may be printed, outlined, textured, laminated, sprayed, or spattered. They may be used for the element of pure fun and experimentation or for such practical items as: pictures, cards, plaques, tablemats, bookmarks, gift wrap, all-over designs, textile prints, mobiles, or for collections to be used for identification purposes.

This is not an inexhaustible resource handbook, but one enabling teachers and students to try a variety of approaches to use

nature's products in art work. As more people become exposed to these ideas, hopefully the more they will create, using their own imaginations and combinations of materials.

Children need to become familiar with many media, procedures, techniques, and processes; and to become even more creative, they need practice and time to experiment and grow in their art.

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APPENDIX

Even though there are many beautiful plants found in woodlands, fields, and along roadsides they must not be gathered indiscriminately. Because of several reasons there are certain species which no longer propagate profusely, and are consequently becoming rare. Recognizing this, Minnesota has a list of the endangered species which are protected by law.

These species should be studied by the students in their classrooms, in order for them to be aware of those flowers which they are not to pick, or dig, or gather in any manner.

Following is the complete list of the protected species as published by the State of Minnesota:

Showy ladyslipper or moccasin flower and all other members of the orchid family (*Cypripedium reginae*)

Trilliums of all kinds and lotus (*Nelumbo lutea*) of shallow waters

Gentians (*Gentiana*) of all kinds

Trailing arbutus

All species of lilies (*Lilium*)