

THE FUNCTION OF CRAFT ACTIVITIES IN EARLY ADOLESCENCE

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CHAPTER I

INTRODUCTION

The Problem

Teachers of children twelve and thirteen years of age are aware that the children become increasingly dissatisfied with the products of their own creativeness. Younger children are content with the experiences involved in creative expression, but in early adolescence those who are convinced that they are not "talented" become aware that the products of their imagination do not compare with what their eyes have seen. This presents the art teacher with the problem of planning a program that will help the adolescents continue to derive emotional satisfaction from their art work. Lowenfeld describes the challenge to art education as follows:

Since art education affects the whole individual, his thinking, feeling, and perceiving, the teacher has an excellent opportunity to influence its changes. Thus he may be able to help youth to overcome an important part of this crisis. Most commonly this change is seen in the fact that children are highly creative, whereas adults, because of their critical awareness toward their imaginative activity, generally lose their creative ability.

The important question will then be: How can we prepare the child most properly for this change that he can continue his creative production in spite of his critical awareness? Or, in other words, how can we prepare the child to create in such a way that he looks with pride on his work instead of being ashamed of it? During this stage for the first time the attention has to be shifted from the importance

of the working process to an increased emphasis on the final product. Thus, the final art product becomes more and more significant with increasing age. This recognition of the growing significance of the final product is a clear demand on the part of youth, and it must be accepted by educators.¹

Since the statement commonly made by the adolescent child is, "I can't draw," it would seem that art activities in which drawing does not play a major part might be approached by children of this age group with more assurance than usually accompanies attempts at drawing and painting. An investigation of the value of craft experiences, therefore, seems pertinent. The tactile qualities of three-dimensional material provide a stimulus to express the physical and emotional changes which are taking place within the individual. Will the pounding, sawing, enameling, weaving, and sewing involved in many craft activities give the children a feeling of adult accomplishment which is lacking in their drawings and paintings? These activities allow the early adolescent to participate in crafts practiced by adults. Many crafts have social aspects; for example, puppetry indicates group participation in making characters for a given play. It is difficult for one child to "string" a marionette without the help of another. Craft-work is instrumental in the constructive venting of extremes in emotional change, as in the casting of plaster and sand molds and the carving of figures from these molds.

¹Viktor Lowenfeld, Creative and Mental Growth, pp. 216-217.

This paper presents the thesis that a major emphasis on craft activities in the creative art program for early adolescence is indicated as an aid in the adjustment of the child to the more mature status in which he finds himself. As a test, during the school years 1955-56 and 1956-57, children in grades six and seven at the W. W. Bushman School in the Dallas Independent School District, Dallas, Texas, participated in various projects in crafts as part of the course of study in art, which also included drawing and painting. A description and an evaluation of these problems are the subject of this paper.

The Community

The W. W. Bushman School is located on the outskirts of the city. It serves residents of a small independent community, Fruitdale, and of the section of the city of Dallas which surrounds it on three sides. The fourth side is flanked by an industrial area, mostly devoted to heavy industry. Low-cost housing is the rule throughout the district.

In most cases, both parents of the children enrolled in the school are employed outside of the home, most of the men being laborers, either skilled or unskilled. The women work in various occupations. A few are clerical workers, but most of the others hold jobs implying lower social status: waitresses, operators of power sewing machines, employees of steam laundries, and similar occupations. In some families

employment is only occasional, and the children take advantage of the free lunch program at the school.

The Children Participating in the Projects

During each of the school years in which the experiment was conducted, the sixth- and seventh-grade classes participated. Thus, the progress of the seventh-grade students the first year and the sixth-grade students the second year could be studied for only one year. Of the 160 children in the sixth grade during the 1955-56 school year, 113 returned to be in the seventh grade the following year, enabling their progress to be noted during the two years. For the purpose of this report, the sixth-grade pupils who did not re-enroll the second year and the seventh-grade pupils who were new to the school the second year of the experiment were eliminated, although the latter group participated in all of the class activities. The schedule of classes was so arranged that each of the four sixth- and seventh-grade sections came to the art room daily for a thirty-minute class period.

Seventh Graders Participating in 1955-56

As indicated in Table I, 135 children--70 boys and 65 girls--were enrolled in the seventh-grade classes in 1955-56. According to the state classification of scholastics by age, the pupils who became thirteen between the first of September, 1955, and the first of September, 1956--67 boys and 56 girls--were considered to be average in age for the seventh grade.

Two boys and 5 girls were older than average, and one boy and 4 girls were younger than average. Fifty-nine boys and 61 girls showed an adolescent state of maturation, a conclusion formed from observation by the art teacher and discussion with the other teachers. There was apparently no correlation between chronological age and physical and emotional evidence of adolescence in the children who participated in these experiments.

TABLE I
SEVENTH GRADERS PARTICIPATING IN THE
EXPERIMENT IN 1955-56

Sex	Number in Grade	Scholastic Age			Maturity	
		Below Average	Average	Above Average	Pre-ado- lescent	Adoles- cent
Boys	70	1	67	2	11	59
Girls	65	4	56	5	4	61
Total	135	5	123	7	15	120

Sixth Graders Participating in 1955-56 Who Continued
as Seventh Graders in 1956-57

Seventy-one boys and 42 girls--113 of the 160 children in the sixth grade in 1955-56--returned the following year. Of these none was older than the average age and one boy was younger than average. Four boys and 28 girls of the 113 children evidenced adolescence as sixth-grade pupils.

Table II shows that the second year of the test, 50 of the 71 boys who had participated in the experiment before manifested adolescence. The number of girls showing such development as seventh graders had increased to 40.

TABLE II

SIXTH GRADERS PARTICIPATING IN THE EXPERIMENT IN 1955-56
WHO CONTINUED AS SEVENTH GRADERS IN 1956-57

Sex	Number in Grade	Scholastic Age			Maturity			
		Below Average	Average	Above Average	Pre-ado- lescent		Adoles- cent	
					Grade 6 7		Grade 6 7	
Boys	71	1	70	.	67	21	4	50
Girls	42	.	42	.	14	2	28	40
Total	113	1	112		81	23	32	90

Sixth Graders Participating in 1956-57

One hundred-five children--54 boys and 51 girls--were in the sixth-grade classes in 1956-57. Of the boys, one was older than average and one was younger, 5 showing adolescent behavior. It may be seen in Table III that the 51 girls included 3 who were over average in age and 2 who were below average, 28 evidencing adolescent behavior.

TABLE III
SIXTH GRADERS PARTICIPATING IN
THE EXPERIMENT IN 1956-57

Sex	Number in Grade	Scholastic Age			Maturity	
		Below Average	Average	Above Average	Pre-ado-	Adoles-
Boys	54	1	52	1	49	5
Girls	51	2	56	3	23	28
Total	105	3	108	4	72	33

The Implication of an Emphasis on Crafts

Of the children participating in the experiment over the two-year period, the incidence of adolescence proved to be 31 per cent of the sixth graders and 84 per cent of the seventh graders, thus indicating that the change to adolescent critical awareness occurs more often in the seventh grade. Therefore, if a craft program is justified, it appears that it is desirable to begin the emphasis on crafts in the sixth grade in order to allow time for the growth of skill required to develop products the children will consider acceptable as they become more critical.

CHAPTER II

DESCRIPTION AND EVALUATION OF CRAFTS INCLUDED IN THE EXPERIMENT

The Craft Program

During the school years 1955-56 and 1956-57 certain craft activities were introduced into the total art program of the sixth- and seventh-grade classes discussed in Chapter I. A conscious effort was made to provide what is generally considered, from the subject-matter standpoint, to be a well-rounded art curriculum by balancing two-dimensional drawing and painting with three-dimensional crafts. Sixth-grade classes, both years, made marionettes. The first year of the experiment each of the four classes made a different type of marionette head. Papier-mâché, egg shells, sawdust and paste, and sawdust and plaster were used. The 1956-57 sixth graders made puppets with sand and plaster heads and sand-filled cloth bodies. They made eggshell toys both years and mosaics were studied the second year.

Seventh-grade classes participated in craft activities that, in general, utilized the improved muscular coordination accompanying adolescence.¹ Wire shadow-puppets, plastic shadow-puppets, toothpick sculpture, bookbinding, textile-painting

¹Gladys Gardener Jenkins, W. W. Bauer, Helen S. Shacter, Guidebook For Teen-Agers (Chicago, 1949), p. 10.

and embroidery seemed to call for this coordination. Of the crafts listed, the wire and plastic shadow-puppets present problems making it necessary to experiment with materials and to make decisions that call for the more abstract thinking of which the adolescent is capable.² Plaster and sand sculpture and woodcuts allowed the seventh graders to utilize the "bursting vitality"³ characteristic of their age. These children also entered into the making of eggshell toys and one class--pupils who had participated in the sixth-grade program the first year--asked to make puppets again the second year.

Work in clay was not included because the school did not have a kiln, nor was weaving stressed because there was no loom.

Crafts Used in the Sixth Grades

Marionettes

A film⁴ from the Visual Aids Department of the school system, the state adopted text,⁵ and a book from the library⁶ which shows professional methods in puppetry were used in motivating the study of the craft which was new to the students.

²Luella Cole, Psychology of Adolescence, Third Edition (New York, 1946), p. 49.

³Ibid. p. 79.

⁴Making and Using Puppets (New York), produced and distributed by Encyclopaedia Britannica Films.

⁵Cora Elder Stafford, Ivan E. Johnson, Viola McElhiney, Art For Living, Book Five (Chicago, 1952), pp. 50-51.

⁶Edith Flack Ackley, How to Make Marionettes (New York, 1936).

In 1955-56 the puppet bodies were all constructed in the same way. Fruit crates and other scrap lumber were used. This part of the project had merit of its own in that the children learned the proportions of the body without the sometimes frustrating experience of trying to draw realistic figures. A two-part airplane-type control made of tongue-depressors and nine strings gave no trouble either in construction or manipulation. The puppet heads were made differently in each class.

Papier-mâché heads.--Class A made heads of paper and paste. They formed a core about the size of a child's fist by crushing a piece of newspaper loosely over a hollow paper tube, covering it with narrow strips of newspaper wet with wallpaper paste. The features were formed of papier-mâché. The product of this technique was found to hold its shape and to dry more



quickly than a head made of papier-mâché alone. The finished shape was covered with paper-toweling strips and painted with tempera (see Figure 1), then slipped over a small piece of wood and tacked to the body, using rubber strips. Hands and feet were made of paper strips and paste, or were cut mitten shape or shoe-sole shape from an inner-tube and tacked

Fig.1--Papier-mâché puppet head.

into place. The children clothed the marionettes, using scraps of cloth brought from home; boys sewed as well as girls. Colored

yarn was used as hair. Some of the children took their puppets home and enlisted the help of their mothers or older sisters. The parents became interested in the craft, many taking the completed marionettes to show to co-workers.

It was found in presenting a show that these puppets should be handled carefully because the head had a tendency to tear away from the body with repeated use in rehearsal and presentation.

Eggshell heads.--Each child in the B class brought an egg shell from home. By puncturing each end of the egg shell, the contents were blown out leaving the form intact except for the small openings. The shell was then covered with narrow strips of paper-toweling that had been run through medium-thick wallpaper paste. This gave the shell a pleasing texture and kept it from cracking. Several children chose pink towels so that flesh paint could be eliminated. As the head was covered, a small piece of wood was fitted into an opening in the end of the shell. This was covered with toweling and paste to hold it in place and to form the neck. Some children formed the features of papier-mâché made of toweling, but most were content to paint the features. The head and neck unit was attached to the body with inner-tube strips. (see Figure 2.)



Fig. 2--Puppet with eggshell head.

Hands and feet were tacked into place. The figures were clothed and strung. Again the head tended to tear away from the body with use.

Sawdust and paste heads.--The C class made puppet heads by mixing two parts sawdust and one part wallpaper paste. Water was added to make a clay-like consistency. The children modeled the heads, pulling out the features from the mass. As in the case of the papier-mache head, a hollow paper tube was used as a core to facilitate even drying and to leave an opening in which to fit a small piece of wood to join the head to the body. Hands and feet, too, were modeled of the sawdust and paste mixture. When these parts were thoroughly dry, they



were sanded, painted, and attached to the body. The puppets were then clothed and strung. (See Figure 3.)

Fig. 3--Puppet with sawdust and paste head, hands and feet.

A tendency to crack as the mixture dried seemed to disturb the children. This,

however, did not detract from the appearance of the puppets when in use.

Sawdust and plaster heads.--Class D carved puppet heads from sawdust and plaster. This proved to be the most popular and most successful method used in 1955-56. Each child mixed two parts of very fine sawdust from a home workshop with three parts of molding plaster and added enough water to make the

mixture the consistency of heavy cream. This was poured into a half-pint milk carton, obtained from the school cafeteria, to a depth of three inches. It was allowed to set until the next class period, when the carton was peeled away, allowing the plaster cast to dry more rapidly. About a week was needed to "cure" the plaster mixture.

The students used pocket knives and paring knives to carve the heads. Some began their work by scratching a general outline on each of the six sides of the block to indicate the shape of the finished heads, thus achieving a realistic type of head with a neck and protruding nose and ears. Some carved the hands and feet also from the plaster and sawdust mixture. One boy rolled pieces of soft white paper and packed it into the hollowed eye sockets to form eyes. (See Figure 4.)



Fig. 4--Puppet with sawdust and plaster head, hands, and feet.



Fig. 5--Sawdust and plaster heads (left and center) and plaster head (right.)

Another child, who insisted that he cast only plaster without sawdust, filled the eye sockets with household cement, then painted the eyes with enamel after the cement had dried. (See Figure 5.) The other children began their work in a direct

way by first rounding all the corners and allowing little protrusion of the nose. (See Figure 5, left and center.) Some children incised the features. Interlocked screw-eyes formed the connection to the body at the neck, allowing a half-turn as in the human head. Hands and feet were made by carving them from the plaster and sawdust or by cutting them from the inner-tube.

Plaster and sand heads with sand-filled bodies.---In 1956-57 the sixth graders made puppets in a slightly different way. Sand was used with the plaster for heads, and the bodies were made of cloth and filled with sand. (See Figure 6.) These



Fig. 6--Puppet with plaster and sand head and sand-filled body.

children had seen and admired the puppets made the year before. All were eager to make puppets, and they wanted to carve them from the plaster mixture. Since the coarse sawdust readily obtainable from a lumber yard does not work well in a piece to be carved, and since the home workshop which supplied the sawdust before had none, sand from construction on the premises was sifted and mixed with the plaster in the proportions used before. The same steps in "curing" and carving were followed as before. The sand proved to be as successful as the sawdust. When marionettes were made the previous year (see page 10), making a wooden body had been a noisy task

and one that consumed many thirty-minute art periods. Wood-working tools had to be shared, and this caused delay; therefore, the children experimented with bodies made of cloth. Since cotton filling proved not to be heavy enough for smooth operation, the cloth forms were filled with sand and stitched at the joints. This type of body was heavier even than the wooden body, causing it to operate more smoothly. A staple, which had been cast in the base of the plaster block, was sewed to the body, much as a button shank is sewed. The control strings were sewed into place rather than tacked, as with the wooden body. Yarn, tempera paint, and scraps of cloth were used in completing the puppet.

Again the mothers became interested, some stitching the bodies on their sewing machines to prevent sand leaks. Many contributed cloth suitable for the bodies and scraps that were especially useful in creating costumes. One class wrote an original play, built the stage and scenery, and gave a performance before the Parent-Teachers Association.

Eggshell Toys

Small toys made of egg shells covered with paper towel-ing and paste seemed to answer the need of a children's hospital for tray favors at Easter. Sixth and seventh graders participated in the craft both years of the experiment. That the craft was particularly successful with both groups may be

explained by the fact that identity with a "worthy cause" is a special need of the adolescent.⁷

When the puppets with eggshell heads were being made, the children discovered that the egg shell covered with one layer of toweling and wallpaper paste did not break, not even if it fell on the floor. The children discussed the needs of hospitalized children and decided that a small toy that would not crack easily would be suitable. They began by making replicas of human heads, but soon used animals and birds also as subjects. The sixth-grade girls, without being directed to do so, worked at first to produce pretty heads, boy and girl heads, and girls with fancy hats. The seventh-grade children tried to make toys that had a humorous aspect. (See Figure 7.) The boys, in general, tried to outdo each



Fig. 7--Eggshell toys

other in originality. One sixth-grade boy made an Indian head using a scrap of fur to make a Mohawk-style haircut. He placed it in a "birch-bark" canoe made of paper and used a flat toothpick to make a paddle. Another sixth-grade boy made a frog from

⁷Gladys Gardener Jenkins, Helen Shacter, and William W. Bauer, These Are Your Children (Chicago, 1949), end sheet.

a bantam egg and green paper toweling. A yellow and black bumblebee was made by a boy who passively rejected the drawing and painting class work. The children became increasingly interested in the project and planned more humorous and unusual eggshell toys. Most children made one or two to take home with them, and more were provided for the hospital than could be used.

Construction paper, cloth, felt, oilcloth, Resonite glue, laces, and net were used as accessories. The problem called for thought in finding new materials and new uses for the materials at hand, and for ingenuity in devising different designs. The problem of making an object that would bring happiness to another gave the children pleasure and seemed to cause greater individuality and creativeness. Each head made--whether it was animal, human, or bird--had a smile.

Mosaics

Mosaic art was introduced in the sixth grade both years of the experiment. Slides and magazine pictures were shown, depicting both ancient and contemporary work with attention to local and Mexican mosaic art. Broken tiles and cement, seeds, crayon-ends, and colored paper scraps to be torn were provided. In 1955-56 some of the children made mosaics of seeds and of crayon-ends set in plaster. A few used torn paper from magazines. In 1956-57 they made pictures in the fashion of mosaics with cut pieces of colored construction paper. No one was interested in making a mosaic of seeds.

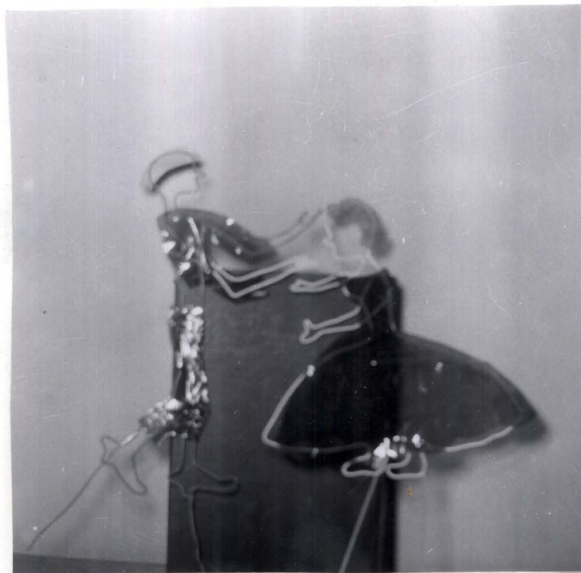
Two girls working together made a mosaic of crayon-ends, depicting a cut watermelon. Two mosaics of broken bathroom tiles were begun; but because of lack of interest, they were not finished.

To the environment described in Chapter I, which includes neither a knowledge of ancient mosaic art nor any association with contemporary mosaic art, may be attributed the failure of the craft to generate interest among the children of the W. W. Bushman School.

Crafts Used in the Seventh Grades

Wire Shadow-puppets

In discussing shadow-puppets, the film, Chinese Shadow Play,⁸ was shown to a class of seventh graders. The Chinese



shadow-puppets were made of transparent donkey skin painted with colored inks in the ancient tradition. This opened the possibility of colored shadows to the children's understanding, rather than the gray shadows cast by opaque materials. (See Figure 8.) Two types of shadow-puppets were made. One

Fig. 8--Wire shadow-puppets method used door-bell wire to

⁸Chinese Shadow Play, (New York), produced and distributed by Athenae Films, Incorporated.

make an outline and transparent materials to cast colored shadows. The pliable quality and the thickness of the insulated wire caused the figures to have an outline that was much like a caricature and allowed movement without joints. The bell wire did not bend sharply, thus preventing too close details, but cast a shadow that was like a crayon line, causing a desirable simplicity in the figure. Color was added by cutting shapes of shirts, trousers, or dresses from colored tissue paper, theatrical gelatin, crape paper, transparent colored plastic, or colored cellophane wrappers saved from candy. Rubber cement, household cement, and cellophane tape held these materials to the wire. Bailing wire or stove-pipe wire was used for controls. The problem caused the children to think and to experiment with materials and shadows. Any type of material that would cast the desired shadow was used. Questions in aesthetics arose. Was the puppet overdone? What constitutes desirable simplicity?

The class related the shadow-puppet problem to its study in literature. The children at each of the six tables in the room chose stories or plays to dramatize from their studies. A humorous story with characters that could be easily exaggerated was found most suitable to the medium. One play that proved particularly adaptable was Washington Irving's "Legend of Sleepy Hollow." These characters were easily visualized and the story had sufficient suspense, humor, and romantic interest to be appealing to the early adolescent.

Plastic Shadow-puppets

A group of ten children chose to experiment with some plastic which they had obtained, by making the jointed type of shadow-puppet. These children worked outside their regular class periods, staying after school or coming early in the morning. The puppets were made of fifteen to twenty gauge calendared vinyl--a frosted plastic material that is stiff enough to stand up, yet can be cut with scissors. The puppets were made in sections, using small wire brads with washers cut from smooth ten-gauge acetate to form the joints. India ink provided lines where they were needed. Tube oil color was found to be the best material to color the puppet, yet transmit



Fig. 9--Plastic shadow-puppets.

light. The color was "patted" on with the brush to eliminate distracting brush strokes. Controls were made from the very fine steel wire ordinarily used in flying model airplanes. Characters made by these children are shown in Figure 9.

One of the group suggested using thirty-five millimeter color transparencies as scenery.

Since the play was emphasizing

Texas, in conjunction with the seventh-grade social studies program, the scenes were easily found and photographed.

The transparencies were projected from the rear onto a screen six feet tall, which stood on the floor. The children made the screen by sewing a rectangle of the calendared vinyl material into a space cut out of a rectangle of black cloth which was fixed in a wooden frame. The shadow-puppets were held in direct contact with the vinyl in order to project a sharp outline. This screen was also used for the wire shadow-puppets.

The making of the screen and the handling of the projected scenery provided a creative activity for those who felt that they could not draw well enough to make the puppets. The others found themselves working in a very realistic way, first drawing the figure, then cutting it and painting it.

This method of making shadow-puppets did not have the limiting qualities that often encourage decisions which create a more aesthetic product. The tendency toward realism caused some displeasure to a few children who felt they could not draw in a realistic way. However, experimentation was called for in finding the best method of coloring the puppets and in arranging the control-wires so that the puppet would "walk," yet the controls be unobtrusive.

Toothpick Sculpture

Only the seventh grade was given the problem of toothpick sculpture. Flat toothpicks and Resonite glue were found to be the best suited materials to the problem. A small piece of cardboard was used as a platform to hold the first toothpicks. The completed sculpture was pasted to a platform of balsa wood with green felt glued underneath.

The subject was limited; an animal, a bird, a human being, or an insect form was called for by the teacher. The lines of the feathers and the proportionate size of the toothpicks to that of birds caused many children to choose a bird. (See Figure 10.)

This project took several class periods. It was entered into enthusiastically by all but one member of the group.

Three of the four seventh-grade classes showed considerable success in their toothpick sculpture. One class of thirty-two pupils, who showed less maturity than the other classes in all fields of the school program, had difficulty in creating the sculpture and were impatient with the tedium of the technique.



Fig. 10--
Toothpick sculpture.

Plaster and Sand Sculpture

The second year of the experiment the problem of sculpture using a mixture of plaster and sand was given to the seventh-grade students. Some of these children had participated as sixth graders in the carving of marionette heads from plaster and sawdust. The children poured the mixture of one part plaster and one part very coarse building sand into pint milk cartons. This was allowed to "set." The carton was peeled away and the cast was "cured" for two weeks. While the plaster dried, the children studied early sculpture in America⁹ and

⁹Stafford, Johnson, McElhiney, op. cit., Book Seven, p. 41.

finished projects at hand. They were limited to carving a replica of a human head and were encouraged to preserve the basic block form as they worked. Pocket knives, files, and coarse sand-paper were used as tools. The mixture was very hard and resistant, not as soft as a pure plaster mold, and provided an outlet for energy which was building up during a time of inclement weather. The small rocks kept the form simple and added a pleasing texture to the material. For about three weeks the class periods were used in the making of these heads. After the carving was completed, paste floor wax was rubbed into



Fig. 11--Plaster and sand sculpture.

the sculptured piece to prevent it from powdering. This gave the sculpture an off-white color.

Green felt was glued to the bottom of the piece. All seventh graders but one participated in the problem. The heads in Figure

11 were made by two boys who, until that time, had been non-participating members of the art class.

Bookbinding

In the 1955-56 school session, the seventh grade, considering the fact that they would soon be promoted to a junior high school, was assigned to the craft of bookbinding. They made memory books for themselves. Several sheets of manila paper were folded and sewed. Tapes were pulled through the stitches and a strip of cloth was glued along the back.

Books stacked in the children's lockers were used to press their work. One girl whose father worked in a paper mill brought enough cardboard for the covers of all the books. Bookbinding cloth was used to fasten the two covers together, and finger paintings were made to use as cover papers for the books. The end sheets, designed with motifs to show particular interests, were then pasted in place. The finished project was an autograph book of which the owner seemed proud. Three girls enjoyed the craft sufficiently to cause them to make second books about half the size of the first.

The project seemed successful that year in that it answered a need of the children concerned. However, the craft was presented again to one seventh-grade class during the 1956-57 session. This class was below average in mental age. This factor, coupled with environmental influences, which do not foster an appreciation of books and their bindings, resulted in poor products. These children were not making memory books, but were rebinding books from home. The craft proved to be a poor choice for this group of children.

Textile-painting and Embroidery

A problem of creating an appropriate design that could be applied to a useful object was presented to the children. New textile paint was at hand and, since they had never used this type of paint, they began to think in terms of design applied to articles made of textiles. As they worked, some of the girls decided that embroidery would be a more suitable

medium for their designs. The emphasis was on appropriateness of design. Pillow slips were embroidered with a repeated closed eye and eyebrow; a set of napkins was painted, using lips and lipsticks as the motif. (See Figure 12.) Other pillow slips were painted with a sleeping quarter moon and winking stars. A boy applied a repeated pattern using a fried egg motif to a cup towel. Hands of various colors with rings, fingernails, and bracelets were painted on towels. The boys worked out

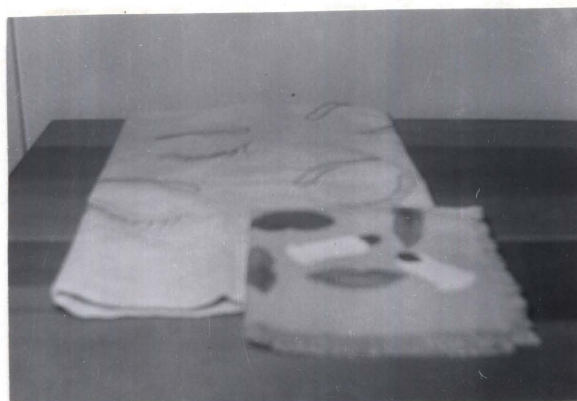


Fig. 12--Textile-painting and embroidery.

a few designs on paper but showed little interest in applying them, although a few boys painted traffic signs or scout symbols on T-shirts. This project was quite popular with the girls, many making several articles. Some cut stencils and repeated stenciled designs on entire sets for the table.

Woodcuts

A visit to Dallas by three members of the Yoshida family of Japanese printmakers set up a lively interest in woodcuts. Boys of the seventh grade brought pieces of plywood to school and soon worked out designs in which at least three colors could be used. By using plywood, wood-block cutting became a less tedious project because larger sections could be cut

away at once, only the top ply being removed. A separate design could be cut on the bottom of the plywood block. One side could have more than one color applied to it before the paper was placed over it and rubbed. (See Figure 13.) The



Fig. 13--Carved plywood block, unfinished.

Japanese printmakers used rice-glue as a binder for the water-color paint used to make the print. Wallpaper paste was found to be a satisfactory substitute in classroom work. This craft interested the boys while the girls were engaged in textile-painting and embroidery. The use of the muscles in sawing size and in removing sections of the outer ply seemed to answer their masculine need. No

girl evidenced an interest in the project, though it was not closed to them.

Summary

Comparison of Popularity of Crafts Used in the Sixth Grade

In comparing the crafts used in the sixth-grade experiment both years, the making of marionettes and eggshell toys were generally popular with both boys and girls. Of the different types of marionettes made the first year, the sawdust and plaster method of working was more popular than the other three methods used because it was a more successful technique.

The use of sand with plaster the second year was as popular and as successful technically as was the use of sawdust with plaster. However, the sand-filled cloth bodies were more successful technically, and were, therefore, more popular with the children than were the wooden block-form bodies used the first year. The making of eggshell toys was generally popular with both boys and girls of both the sixth and seventh grades. This popularity has been explained in the foregoing discussion as stemming from the identity with a "worthy cause." Mosaic art was not generally successful with either boys or girls. This lack of success has been suggested as having been caused by the children's environment and the lack of association with the understanding of mosaic art.

Comparison of Popularity of Crafts Used in the Seventh Grade

In comparing the crafts used in the seventh-grade classes both years, the wire and the plastic shadow-puppets, toothpick sculpture, and plaster and sand sculpture were generally popular with both boys and girls. The popularity of the shadow-puppets seems to be explained by the increased thought and experimentation used in the crafts and by the use of the adolescent's improved manual dexterity. The popularity of plaster and sand sculpture appears to be explained by the enjoyment of the physical force necessary to carve the plaster, giving vent to mental and emotional tensions of the adolescent.

Bookbinding found popularity with the seventh graders the first year of the experiment. This popularity may have

been caused by the use of improved manual dexterity and by the fact that the children were making memory books for which they felt a personal need. The unpopularity of the bookbinding craft the second year seemed to have its cause in the mental factor and environment mentioned previously, and by the fact that the rebinding of books already in their possession answered no personal need. Textile-painting and embroidery were generally popular with the girls. The feminine connotation of the craft and the lack of physical force necessary to participate in it explains this popularity and also explains its general unpopularity among the boys. That the process of the woodcut was popular only with the boys may be explained by the preoccupation of the girls with the textile-painting and embroidery and by the implication of masculinity in the carving of wood.

CHAPTER III

CONCLUSION

Comparison of Participation in and Satisfaction Derived from Drawing and Painting with Participation in and Satisfaction Derived from Crafts

In the evaluation period in which the pupils participated at the completion of each activity, the teacher had the opportunity to learn the degree of satisfaction felt by the children in regard to their recent experience. They based their expressed satisfaction not only on the end product of their creativeness, but also on the pleasure derived from using the particular technique employed. The number participating in an activity was also considered by the teacher to be an indication of its popularity. The number in each grade who participated in each activity and the number who considered the end product satisfactory may be seen in Table IV.

Sixth Graders

Of the 125 sixth-grade boys, 92--approximately three-fourths--participated in all drawing and painting and craft projects. Fifty-one of these indicated satisfaction with both areas of activity. Ninety of the 93 sixth-grade girls participated in all projects and 57 indicated satisfaction

TABLE IV

COMPARISON OF PARTICIPATION IN AND SATISFACTION
DERIVED FROM DRAWING AND PAINTING WITH
PARTICIPATION IN AND SATISFACTION
DERIVED FROM CRAFTS

Grade	Number of children	Participation			
		Drawing and painting only	Both areas of activity	Crafts only	Neither area of activity
	B* G*	B G	B G	B G	B G
Sixth	125 93	5 1	92 90	28 2	. .
Total	218	6	182	30	.
Sev- enth	141 107	9 2	90 103	38 2	4 .
Total	248	11	193	40	4
Grand Total	466	17	375	70	4

* B, boy G, girl

TABLE IV--Continued

Satisfaction							
Drawing and painting only		Both areas of activity		Crafts only		Neither area of activity	
B	G	B	G	B	G	B	G
13	5	51	57	54	28	7	3
18		108		82		10	
17	10	54	62	60	35	10	.
27		116		95		10	
45		224		177		20	

in both areas of activity. Six pupils--5 boys and one girl--participated in the drawing and painting activities only, but 18 of the total group of participants--13 boys and 5 girls--found satisfaction only in this activity. Thirty pupils--28 boys and 2 girls--participated in craft activities only. Of the total of 212 participants, 82--54 boys and 28 girls--found satisfaction in this area only. All of the sixth graders participated in at least one area of activity, although 10 pupils--7 boys and 3 girls--were not satisfied with any of the end products of their work. Of the 188 who participated in drawing and painting, 126, or 67 per cent expressed satisfaction, while of the 212 who participated in crafts, 190, or 89.6 per cent, expressed satisfaction.

Seventh Graders

One hundred ninety-three of the 248 seventh graders--90 boys and 103 girls--participated in both areas of activity. Of these, 116--54 boys and 62 girls--were satisfied with all of their products. Eleven pupils--9 boys and 2 girls--participated in drawing and painting only. Twenty-seven--17 boys and 10 girls--showed satisfaction with their drawing and painting only. Forty children--38 boys and 2 girls--worked solely in crafts, but 95--30 boys and 35 girls--were satisfied only with their craft work. Of all the children, 4 seventh-grade boys resisted participation in any area of activity. These boys were in general non-participants and

often non-conformists in all areas of their school work. Ten boys were dissatisfied with all end products of their art work. No seventh-grade girls showed dissatisfaction.

Summarizing the above statistics, one finds that of the 204 seventh graders who participated in drawing and painting, 143, or 70 per cent of the group, felt satisfied. On the other hand, of the 233 who participated in crafts, 211, or 90.5 per cent felt rewarded.

Children of Both Grades

In considering the 466 children of both grades who participated in the experiment during the two-year period of 1955-57, the following grand totals may be observed: Seventeen participated only in drawing and painting, 375 participated in both areas of activity, and 70 participated only in the craft activities. Forty-five expressed satisfaction with drawing and painting only, 224 expressed satisfaction in both areas of activity, and 177 were satisfied only with crafts.

Twenty children were dissatisfied with all end products of their participation. Of the 392 who participated in drawing and painting, 269, or 68.8 per cent, were satisfied with their end products. Of the 445 who participated in craft activities, 401, or 90 per cent, were satisfied with their end products.

Implication

These statistics show that a larger number--21.2 per cent more--of the children who participated in this experiment found

satisfaction in their craft activities than in their drawings and paintings. Thus, it may be deduced that, placing a greater emphasis on crafts in the program of creative art for the sixth and seventh grades may cushion the shock in the "crisis" of awareness which causes, in some pupils a cessation of creative activity.

Recommendation for Further Study

The statistics comparing the satisfaction derived from drawing and painting and from craft activities by the children of the W. W. Bushman School who participated in the experiment show not only that 48 per cent of the whole group derived satisfaction from both areas of activity, that 38 per cent derived satisfaction from crafts, and that 9.7 per cent derived satisfaction from drawing and painting, but also that 4.3 per cent derived satisfaction from neither area of activity. Thus, it is recommended that an investigation be made to determine the mental and emotional causes behind the dissatisfaction felt by some toward all the products of their art work and the ways in which these children may be aided. It is also recommended that the drawing and painting activities be more closely correlated with the craft activities in order that the large group who showed no interest in drawing and painting may be led toward satisfactory experiences in this area.

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