

THE FURNISHING AND ARRANGEMENT OF A CLASSROOM  
FOR HIGH SCHOOL ART

by

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## INTRODUCTION

The conception of education has undergone many changes in the last few years. The purpose has changed from specific education to aid a privileged few, to general education designed to meet the needs of present day living for the many. Hand in hand with this change of purpose has marched a changed curriculum including many different areas of interest. One of the more outstanding of these changes has come in the area of art education. Instead of the old belief that art was the appreciation of old masters and the production of pieces of art for the sake of art, modern educators point to art as being a means of self expression for all. It should be made possible for old and young, talented and untalented, to use art as a means of self satisfaction - the joy of creation should belong to all not just a few (25). This change in purpose and curriculum necessitated a change in teaching methods and tools, one of the principal tools being the school room itself. From the old dreary classroom a new one has emerged to fill the requirements of modern education. The atmosphere has changed from the stiff formal class of yesterday to the friendly informal setting of today. Even the black board has had its face lifted - no longer black but colored. Strange as it may seem, though art education has broadened and taken a place in general education, art classrooms have fallen behind in efficiency. Many teachers are struggling to teach beauty of de-

sign, decoration and color in a classroom that is the poorest possible example of all of these. Our children can not learn one thing while living in the direct opposite (11). More is learned through environment than is ever learned through formal teaching. It is asking too much of a teacher to ask her to instruct her students one way and force her to use an environment that teaches the opposite. The art classroom, perhaps more than any other school room, should provide a beautiful, well designed and properly arranged area in which the children learn first hand the principles of art. It, perhaps, more than any other one area of subject matter depends on the students observation for learning. Very little of art application was gained through reading when compared to the amount gained by "seeing" and "doing."

#### METHOD OF PROCEDURE

The data for this study were secured through interviews with fourteen art and home economics teachers, three superintendents, one art supervisor, two principals and two architects. Some of the ideas of the leading school architects in the United States were secured through library references. Interview sheets (appendix) were used.

Suggested floor plans of art classrooms were studied as were lists of advertised available equipment. From the interviews and from the floor plans and equipment, blueprints for an adequate room were designed to meet the needs of art classrooms in the



high schools of Texas.

REVIEW OF LITERATURE

The Commission on Secondary School Curriculums in a recent report (21), asked these questions about art education.

What is its most fundamental aim? To learn to use the customary art media and to appreciate what the masters have created? Or, as general education is coming to believe, to contribute to the growth of persons and to the enrichment of their living? If its aim is the latter, must not art education too make a wider attack? Must it not turn its attention to study of the needs of individuals and to efforts to create a culture rich in art possibilities so that by living in it, interacting with it, individuals may make esthetic satisfaction one of their requirements?

With the broadened meaning of art education many more people should be receiving benefits from the art programs in the schools across the nation. Because of this increase in art teaching and change in goals the classrooms have changed, not only the art room but all the school plant.

Dewey (11) believed that experience is an interaction between the person and some part of his environment. Because experience results in learning, it is one of the duties of the school to provide an environment through which constructive experiences are gained. The means by which a school provides a worth while education for living are through classrooms, subjects, teachers, and all media with which the student comes in contact. Waite (22) stated this idea in this way:

If learning is a function of the senses and if this function varies for each individual, then the program of instruction should be multi-sensory rather than unisensory. If learning is essentially an active process, then the learning environment should be an aid to that process rather than a limiting factor.

Hamon and his associates (14) went even farther and maintained that the health and happiness of the child were effected by the school building when they said:

The purpose of the school plant is to provide the physical facilities for the educational program. It is more than a shelter from the weather and an educational tool. In fact the plant may by its very architecture and design teach children to like school or to be afraid of school. It may teach children to be neat, clean, and healthy, or it may have the opposite effect.

Bursch and Reid (8) had agreed with the above statement and had listed some of the characteristics necessary in a school plant to produce the desired effect. They stated that the;

...plant, above all, must be cheerful, inviting, stimulating, it must provide an environment for learning, working, and living that makes for richness of experience in such positive terms that the impressionable years of a child's life will receive lasting influence for good.

General needs in art classrooms have been listed by several individuals and groups, not all of them holding the same idea. The Guide for Planning School Plants (14) pointed out that the art and drawing rooms should have these characteristics:

North lighting is desirable. About 30 to 35 square feet of net floor space per student is needed exclusive of storage.

Special consideration should be given to lighting and decoration for higher levels of illumination, control of shades, and suitability for color discrimination. The art teacher should be given considerable

leeway in selecting the decorations for this room, but principles of good lighting should not be violated.

This department should be provided with an abundance of storage shelves, drawers, cupboards, exhibit counters, work counters, filing cabinets, picture files, folio trays, unfinished work storage cubicles, book shelves, electrical outlets, gas connections, work sink with hot and cold water, large tackboard area, small amount of chalkboard, drawing tables, large work tables, easels, model stands, provision for visual aids, spray outfits, and paper cutters. Potter's wheels, kiln, and other provisions for clay modeling are desirable. The art room should be planned as an informal working laboratory rather than a conventional classroom. Provisions should be made for display of art objects outside the classroom.

It went on to add that in all classrooms there should be a teacher's locker with shelves for books and hanging space for wraps, locked drawers or compartments available for storage, and adequate desk and filing equipment for the teacher. Each room "should be equipped with adequate and conveniently located electrical outlets, screens, darkening devices, chart and map display devices and other facilities needed for the audio-visual aids to be used in the room." (14)

In a Western Arts Association report (24) it was emphasized that the "art department must not be an isolated unit. It is not a show place, it is a room in which students will enjoy working..." The committee also suggested that the room should have a north or east exposure, with walls of light, clear colors and furniture and woodwork with a natural finish. There should be adequate provision for displays so that the contribution of the department might be recognized.

According to Perkins (18) The

... essential ingredient in terms of physical plans for an arts and crafts program is just sheer space. A second safe generalization is that it should not be too nice to use.....Light? Yes. Enough so that it will be pleasant to paint, sharp enough so that it will be adequate for metal craft or leather work...

The intangible of this room is all important. It cannot be over stated that space similar to that we give over to classrooms is an inappropriate as it can possibly be. It is too finished, too restricting in its plan, and will be conducive to too fussy formality. The secondary objective of an art and crafts program is to teach people to make useful things beautiful. This primary object is the pleasure and experience they get in doing so.

This author recommended factory space as probably being the best model. The characteristic of a factory that was desirable for an arts and crafts program was that the equipment was easily rearranged to meet new needs when the first operation was no longer profitable.

In the field of architecture much study has gone into planning school plants to meet the changing needs. Art and Home Economics depend a great deal on seeing and doing. Therefore, these class rooms perhaps more than the other ones used, should have the facilities to teach by example. The need for more informal and attractive settings for instruction have been realized by architects and educators alike. Perkins (18) in an article in the Architectural Record maintained :

The plant should be beautiful in exterior and interior design, in decoration, furnishings and all appointments. Education must concern itself more definitely with the emotions of both children and adults. Concepts of beauty and art can best be taught by example and by subtle suggestion.



Each schoolroom should teach principles of design, of color and of beauty of arrangement and appointments. School room furniture should be chosen for its beauty as well as for its utility. Pictures should harmonize with the room, the furnishings and the decorations. There should be variety of color and design and variation from room to room in line with the various education purposes for which rooms are used.

Not everyone agreed that art should be taught by example in the classroom for Birren, (6) a color specialist, believed that "if art training is to be beneficial for young bodies and minds, it should be confined to the school curriculum and not carried so far as the walls and furnishings of the classroom." Birren believed that functional color, or that color that is used in hospitals, offices, and schools, should not be the result of personal taste.

It requires little imagination to realize that color may be as distracting and annoying as it may be delightful...it is in every way as difficult to read a book against the competition of bright color in the field of view as it is to listen to a teacher against the distraction of noise.

Birren also contended that the element of brightness is more important than the element of hue. He recommended pale blue-green and peach for classrooms with endwalls of a little softer and deeper tone to provide visual and emotional relaxation.

In a report given to the Western Art Association by one of their committees on classrooms (24) it was suggested that in selecting colors to be used in art classrooms it should be remembered that

Since the maintenance problem is always an important part of decorating, simplification and a certain amount of standardization are essential. Selection of a few colors for walls and some variation in dado colors



will result in sufficient variety and an economy as well ...A general scheme should be decided upon for the entire building so there is a feeling of unity. Selection and arrangement of colors should be determined by the use to which each room is put and by the geographical exposure and the amount of available light.....Interest may be added by notes of bright color, giving variety and vigor to the color scheme. This might be bookshelves, display cases or bulletin boards.

Birren (6) disagreed that colors should be effected by room exposure - because school were seldom used in the summer and therefore orientation was of no great consequence. He believed the color should suit the age level and the task, and recommended cool colors for secondary grades.

The use of color in schools could serve several purposes both psychologically and physiologically. The whole atmosphere of the building was affected by the colors. This was pointed out by Hamon (14) when he stated that "The intelligent use of color is essential for the prevention of an institution-like atmosphere which is the result of a mono-chromatic color scheme. Walls may be of any colors which are aesthetically and psychologically suitable."

It was of interest to note the change in ideas with the passing of years. In 1914 Bailey (4) wrote that a classroom, to look cheerful and restful, must avoid "the use (of) brilliant hues or violent contrasts of color." While in general that is still a good rule, as has been shown, accents of bright colors and contrasts are recommended to relieve monotony and provide visual relaxation. He further suggested that rooms should have one dominate hue however grayed it may be. This hue should be selected

on the basis of the amount of light in the room and should be very light in tone. These last rules are ageless and are still good general criteria for selecting room colors.

In recent years special care has been taken to plan all classroom color schemes to provide reflection surfaces and thereby increase the natural light. Engelhardt (12) stated that:

Where adequate natural light is available, the reflection factors of walls are less important than when limited light must be regained as much as possible by wall reflection.

Bilateral and clerestory lighting offer wide opportunities in wall color treatment...

High intensity reflected light may be overstimulating and irritating. Darkened walls, with a light wall under clerestory windows, would provide relief from continuous exposure to brightness.

Through recent studies, the conclusion has been reached that with a greater amount of natural light being used, colors for walls, ceiling and chalk boards should show some contrast between value and intensity as well as hue. It has been suggested that accents of very intense color be used and, in some cases that the painting of an entire wall in a darker shade would relieve the monotony of a pastel color scheme and would not hinder efficient lighting of the room but would rather assist it.

With the changes inside the school house, changes on the outside have been made. The school plant has become more attractive and less institutional looking as can be observed by studying new schools. The windows have grown but changed so that bilateral or celestory lighting could be used and glass brick has become very widely used to insure sufficient light without glare.

The art classrooms, because of the character of work carried on, demanded good lighting to prevent eye strain from close work. Studies have shown it is impossible to have only natural light and have the correct lighting all over the room all the time. Regardless of the type windows used, the room requires shades and artificial lighting. In old classrooms with inadequate sunlight Anderson (2) reminded teachers that they "should know that painting a classroom can improve seeing conditions. Colors employed in ceilings, walls, chalkboards, bulletin boards, wood trim, floors and furniture greatly affect lighting." It has also been recommended that "paint finishes should be flat or mat on all interior surfaces at eye level or above. Semi-gloss finish is permissible below the eye level." Anderson (2) recommended a few contrasts in a pastel color scheme with light wood work and green chalkboards. He also believed that all parts of the classrooms should be as nearly evenly lighted as possible by eliminating dark objects and reducing brightness contrasts which will force the eye to constantly readjust, thereby ultimately weakening it.

Englehardt's (12) rules on brightness contrasts were a little different than Anderson's (2). Englehardt reminded us that the dark wall is more restful. He also believed that bright and light surfaces should be above the eye so that the eyebrows could act as blinds. Bailey (4) also wrote that the background should be darker than the task and that the furniture should be as dark as the trim in the room, but at that time it was quite dark and caused too much contrast between

the task and its background. Hamon (14) suggested that the finish of all desks and equipment should be natural or equivalent in reflection ability to light maple. This included such things as casework, shelving, supplementary tables, machines, lockers, filing cabinets, and all of the desks. Desks of this color would meet the requirement of a darker background without too fatiguing contrasts.

In talking about means of controlling light Hamon (14) named such things as window shades, venetian blinds, louvers, and fabric diffusers and recommended that these be used when there is an excess of brightness due to direct sunlight and bright wall areas of adjacent buildings. He went on to give the desirable features of a satisfactory window shield as being:

- a. It must exclude direct sunlight and admit as much light as possible into the room while presenting a surface of comfortable brightness.
- b. Its position should be fixed and require no manipulation.
- c. It must be easy to maintain.

The desirable characteristics of shades or venetian blinds were:

- a. Fabric window shades should be of the multiple roller type...of a highly translucent material harmonizing with wall colors.
- b. Venetian blinds - light colors to increase reflection, and install so as not to cut out light when retracted.
- c. These and/ or other methods should exclude direct sun rays but admit the maximum of sunlight without glare.



Bailey (4) warned against getting shades of such color that light shining through them ruined the color scheme. That rule would apply today.

Anderson (2) pointed out that artificial lighting systems should be made to produce a uniform distribution of shadow-free, glare-free illumination with enough intensity to meet brightness required for all parts of the room. Consideration should have been given to the probable deterioration of efficiency of the shades in service under prevailing conditions. "Lights may be incandescent or fluorescent. In either case the lights should be luminous semi-indirect type to protect eyes from too great brightness." Anderson also pointed out that the switches should be so connected that inner lights may be turned on without turning on those near the window.

For effective lighting of any type in a classroom, the conditions Englehardt (12) listed as necessary were:

1. There should be ample light to carry on the varied tasks. In some cases, particular locations can be set aside for certain tasks. In others a given activity may occur anywhere within the room.
2. The light should have a pleasing quality. This includes attention to effective colors and the elimination of annoying glare or brilliant sources of light.
3. Sunshine at suitable times and for certain tasks, is highly desirable. But it should be controllable.
4. Opportunity for pupils to look out windows is imperative. There is no proof that the educational values of observing sky, land, water or man-made structures outside the school should be abandoned for reasons of subjective classroom lighting "standards."



5. Low cost is important, both initially and in maintenance and operation.
6. Both natural and artificial light should be readily controlled by the teacher to meet changing conditions and needs during the school day.
7. Informal and pleasant conditions should be created. High intensity and uniform illumination may hinder the development of these conditions.

Decoration in an art classroom, like all rooms, can prove to be difficult. Bailey (4) set forth a few general rules about the use of illustrative materials that are as good today as they were when he wrote them. They are:

- (1) Narrow spaces between windows are not good places for pictures or casts in low relief.
- (2) Casts in relief demand a strong side light...
- (3) A picture presenting but slight contrasts of light and dark demands more light than a picture presenting strong contrasts...
- (4) The mat or frame of a picture should be in harmony with the picture...
- (5) Casts should be framed into the wall or so installed that they appear vitally related (to the wall)
- (6) Pictures should be as closely related to the wall as possible. They should not rest upon the top rail of the blackboard or tilt forward into the room.

Bailey (4) went on to point out that "all decoration should be chosen for the students enjoyment and satisfaction. They may include pictures, casts, potted plants, fresh flowers and temporary exhibits." The last two means of decoration could provide students actual experience in arrangement and effective

display. Sometimes opportunities have presented themselves when the class could design and produce various items for decoration in the school room. When this opportunity was presented it should have been given the students. It would have given them a chance of applying class work to practical use and would have helped develop their taste for "good" design as they saw it in their surroundings. (15)

In a school building program superintendents, principals, architects and teachers should all have had a part in the planning. It is actually the teacher that figures the most in the operation of the school plant, therefore it is the teacher that counts for success or failure of a plan. For a teacher to be able to use any tool in teaching she must be instructed in how best to use it. No matter how good the plan nor how efficient the furnishings, if the teachers have not used the plant to its fullest extent, the plans and equipment have been partially wasted. A teacher should be able to offer intelligent suggestions as to creative arrangements of space, furniture and equipment and by this means aid the architect in his planning. The architect in turn should explain his plans to the teacher showing her his ideas for the full use of the room. Because the teaching techniques used in various classes differ with the teacher and the subject taught, it is necessary that individual teachers have plans made, suggestions and recommendations for their individual classrooms which should be presented to the architect. This balance in planning between teachers, archi-

pects, and superintendent paves the way for using the school to its full potential. (14)

A classroom for arts and crafts then should reach a medium between an attractive classroom and serviceable factory space with adequate lighting for all tasks. The equipment should be moveable facilitating easy changes. The colors should be of grayed hues with contrasting end walls or accents of a color. To prevent glare from sun light and reflections adequate shades should be provided. The furnishings should be of light finished wood of a type not easily marred. The "arts and crafts room" is a part of the school and not a thing just tacked on for good measure. It is a place to be enjoyed as well as a place for work.

## FINDINGS

### Classes Taught

Prior to designing the classroom, a study was made of the principle courses taught in art and art in home economics. The teachers interviewed also stated their preferences in equipment for art classrooms. The results of that study were found to be as follows:

Table 1. Extent of drawing taught in art and home economics art.

Drawing	: Art	: H.E.	: Teachers : No.	: Offered %
Pencil	10	4	14	100.0
Pen and Ink	5	0	5	35.8
Charcoal	8	0	8	64.3
Chalk	6	0	6	42.8

Pencil drawing was the only subject in the art program that all schools taught. Only about thirty-six per cent of the teachers interviewed taught pen and ink drawing while about sixty-four per cent taught charcoal. Chalk drawing was taught by less than half of the teachers or 42.8 per cent.

Table 2. Extent of weaving taught in art and home economics art.

Weaving	: Art	: H.E.	: Teachers : No.	: Offered %
Cardboard	6	0	6	42.8
Loom	7	2	9	71.4

Even though cardboard weaving was not taught by any home economics teachers, six of the ten art teachers interviewed taught it. Loom weaving on the other hand was used by about seventy-one per cent of the teachers despite the higher cost of the equipment involved.

Table 3. Extent of weaving variations taught in art and home economics art.

Weaving variations	Art	H.E.	Teachers : Offered	
			No.	%
Stitchary	1	2	3	21.5
Braiding	5	0	5	35.8
Knotting	5	0	5	35.8

Variations of weaving include embroidery, braiding and knotting. None of these were taught by more than thirty-six per cent of the teachers. Only three of the fourteen teachers questioned taught stitchary. Braiding and knotting were taught by no home economics teachers and only one half (50 per cent) of the art teachers or 35.8 per cent of all teachers interviewed.

Table 4. Extent that puppets were taught in art and home economics art.

Puppets	Art	H.E.	Teachers : Offered	
			No.	%
String Marionette	6	0	6	42.8
Hand Puppets	6	0	6	42.8
Shadow Puppets	4	0	4	28.6
Masks	8	0	3	57.1

Puppets have proved successful in over half (57 per cent) of the art classes with masks being the most popular form. The least used type of puppetry was shadow puppets which were taught by only four teachers (28 per cent). Less than half the art teachers (43 per cent) used string marionettes and hand puppets.



Table 5. Extent painting is taught in art and home economics art.

Painting	: Art	: H.E.	Teachers : Offered	
			No.	%
Water Color	9	0	9	64.3
Gouache	6	0	6	42.8
Oil	7	0	7	50.0
Finger	3	2	5	35.8

Painting media used by high school teachers were water color, gouache, oil and finger paint. Almost all (9 out of ten or 64 per cent) of the art teachers used water color, either opaque or transparent. Only five teachers (36 per cent) used finger paint which was not surprising as this media is usually found in grade school. Oil and gouache were used by seven (50 per cent) and six (43 per cent) teachers respectively.

Table 6. Extent the commercial arts are taught in art and home economics art.

Commercial Arts	: Art	: H.E.	Teachers : Offered	
			No.	%
Lettering	8	2	10	71.4
Posters	8	4	12	85.7
Package Design	4	4	8	57.1
Window Display	4	4	8	57.1

Commercial arts proved popular in both art and home economics art classes. Lettering was taught in seventy-one per cent of the classes. Posters were used by even more teachers (86 per cent) most likely because they were an excellent means of teach-

ing composition and because posters were frequently used by the students. Package design and window display were used in fifty-seven per cent of the classes.

Table 7. Extent graphic processes are taught in art and home economics art.

Graphic Processes	Art	H.E.	Teachers : Offered	
			No.	%
Stenciling	9	2	11	78.6
Block Printing	7	0	7	50.0
Silk Screen	6	0	6	42.8
Etching	5	2	7	50.0

Stenciling was used in seventy-nine per cent of the classes. It is a versatile though simple means of getting pleasing designs and is an easy way of producing a repeat. Block printing (50 per cent) and silk screen (43 per cent) printing and etching were presented in about half the art classes.

Table 8. Extent of design and color theory taught in art and home economics art.

Theory	Art	H.E.	Teachers : Offered	
			No.	%
Design	7	2	9	85.7
Color	7	2	9	85.7

Design and color were not taught in all the classes. It would seem that these studies would be the foundation for all other subjects and projects in the art field. It is likely that the remaining fourteen per cent of teachers presented the

fundamentals of design and color incorporated in some other work.

Table 9. Extent of carving taught in art and home economics.

Carving	: Art	: H.E.	Teachers : Offered	
			No.	%
Soap	7	0	7	50.0
Wood	6	0	6	42.8
Candlewax	0	0	0	0.0
Clay	7	0	7	50.0
Plaster	5	0	5	35.8
Stone	4	0	4	28.6

Only fifty per cent of the teachers used soap carving. Wood carving was given as part of the art program by about forty-three per cent of the teachers. It would be a satisfying medium yet inexpensive where wood is plentiful. Clay was another popular material for carving as can be seen by Table 9. Plaster (36 per cent) and stone (29 per cent) were used by fewer teachers probably because of the degree of difficulty and cost of materials. Candlewax was not used at all.

Table 10. Extent of variations of carving taught in art and home economics art.

Variations of Carving	: Art	: H.E.	Teachers : Offered	
			No.	%
Paper Sculpture	7	0	7	50.0
Paper-mache'	8	2	10	71.4

Variations of carving used by the majority of the teachers were paper sculpture (50 per cent) and paper-mache' (seventy one per cent) with paper-mache' being the most popular.

Table 11. Extent of crafts taught in art and home economics art.

Crafts	: Art	: H.E.	Teachers : Offered	
			No.	%
Clay	7	0	7	50.0
Leather	6	4	10	71.4
Metal	7	4	11	78.6
Wood	5	2	7	50.0
Glass Etching	0	2	2	14.3
Textile Painting	6	4	10	71.4
Basketry	5	0	5	35.8
Plastics	4	0	4	28.6
Beading	1	0	1	7.2
Shell Craft	2	2	4	28.6
Tye and Dye	0	1	1	7.2
Flower	0	1	1	7.2
Candle Making	0	1	1	7.2

Crafts as a whole were taught by more teachers than any other section of the subject matter field except drawing. Leather, metal and textile painting were the most popular with metal being used in seventy-nine per cent of the schools. Leather and

textile painting each were taught by seventy-one per cent of the teachers. Next in popularity were clay and wood which were found in fifty per cent of the classrooms. Basketry was used by a little over a third (36 per cent) of the teachers while plastics and shell craft were used by twenty-nine per cent. Glass etching, tye and dye, flower crafts and candle making were found only in home economics classes. Glass etching was used by fourteen per cent and the others by seven per cent of the teachers.

From this study it was seen that storage space must have been provided for the tools and supplies needed in pencil and charcoal drawing, loom weaving, mask making, water color and oil painting, lettering, posters, package design, window design, stenciling, block printing, etching as well as materials used in teaching color and design. Storage provision was necessary for soap and clay carving, paper sculpture, paper-mache' and the major crafts as clay, leather, metal, wood, and textile painting. In addition to storage for those named, space had to be left for the bulk supplies and illustrative material the teacher would need in rounding out her program study.



## Furnishings and Equipment

Table 12. Equipment in use and preferences.

Type	: Have	: Teachers %	: Prefer	: %
<b>Student Desks</b>				
Metal	0	0	0	0
Wood	3	25.	0	0
Single	3	25.	1	8.33
Double	0	0	0	0
Slant Top	1	8.33	0	0
Flat Top	0	0	0	0
Adjustable	3	25	0	0
Stationary	0	0	0	0
Movable	2	16.66	0	0
<b>Student Tables</b>				
Wooden	4	33.3	7*	58.3
Metal	0	0	0	0
Flat Top	2	16.6	7*	58.3
Slant Top	2	16.6	0	0
<b>Student Chairs</b>				
Stools	3	25.0	7*	58.3
Single benches	2	16.6	1	8.3
Double benches	0	0	1	8.3
Moveable	2	16.6	2*	16.6
Moveable	4	33.3	4	33.3
<b>Blackboards</b>				
Black	1	8.33	0	0
Green	4	33.3	8	66.67
Number wanted	0	0	8	66.67
<b>Bulletin Boards</b>				
Panel around room	8	66.67	1	8.33
Moveable	1	8.33	4	33.33
Wall board	2	16.66	0	0
Cork	6	50.00	4	33.33
How Many	Several			

Table 12. (concl)

Type	: Have	Teachers		:
		%	: Prefer	
Sinks				
Desk	8	66.6	2	16.66
Wall	2	16.66	0	0
Sides Open	Average	3	3	25
Height Outlet	12			
	14			
	18			
Storage				
Student:				
Lockers	8	66.67	3	25
Metal	0	0	3	25
Wood	8	66.67	0	0
Closed	8	66.67	3	25
Drawers	8	66.67	0	0
Metal	0	0	1	8.33
Wood	8	66.67	0	0
Shelves	7	58.3	0	0
Closed	0	0	1	8.33
Open	7	58.3	0	0
Drawing Board	4	33.33	2	16.66
Vertical Arr.	5	41.67	3	25.
Horizontal Arr.	5	41.67	3	25.
Teachers:				
Filing Cases	2	16.66	5	41.67
Bulk Supplies	8	66.67	5	8.33
Shelves	3	25	0	0
Kiln	7	58		
Room	6	50	0	0
Basement	1	8.33	6	50

\* Result of Survey in Dallas Schools.

Table 12 shows that the majority of the teachers interviewed preferred tables to desks for use in art classes. This was logical as tables provide more working space in a compact unit by providing room for two to four students. Flat top wooden

tables were ranked above metal tables by fifty-eight per cent of the teachers. Eight per cent wanted desks while the remaining thirty-three per cent did not state preferences. By observation of the writer, those who did not give preferences were using wooden tables in their classrooms.

Sixty-seven per cent of the teachers wanted one green blackboard. Thirty-three per cent already had green boards and were well pleased with them (Table 12). All the teachers desired plenty of bulletin board space but they were not agreed on where they wanted it. Two-thirds of them had tackboards running in a panel around the room. One other teacher wanted this arrangement. A third of the teachers (33 per cent) wanted moveable tackboards, one teacher had a moveable tackboard. Sixteen per cent of the classrooms had wall board and fifty per cent had cork for tackboards. Thirty-three per cent of the teachers expressed a desire for cork tackboards.

Sinks built into desks were used by sixty-seven per cent of the teachers and seventeen per cent used wall sinks (Table 12). Another seventeen per cent wanted desk sinks. The average number of sides open on the sink were three. However many had only two, and one of those sides was on a lane of traffic. All the teachers wanted three sides accessible. The water faucet was placed between twelve and eighteen inches above the sink. One teacher felt that hers (18 inches) was too high but did not suggest a better height for it.

Storage space was a problem in most of the classrooms visited. (Table 12). In one situation there was one small closet and one cabinet 120 inches long 24 inches deep 36 inches high that was expected to hold all the teacher's supplies and the student material that was unfinished. Two-thirds of the rooms had student lockers of wood that were closed by doors. Sixty-seven per cent of all the classrooms had wooden drawers for student work storage. A little more than one-half (58 per cent) of the rooms had cabinet shelves for storage. Drawing board storage was provided in one third of the rooms. One-fourth (25 per cent) of the teachers preferred lockers, (closed metal), eight per cent wanted metal drawers and eight per cent wanted closed shelves. Vertical and horizontal arrangements of storage proved equally popular with forty-two per cent of the teachers using each kind and twenty-five per cent wanting each kind.

Teacher storage (Table 12) consisted of filing cases, shelves and provisions for bulk supplies. Only sixteen per cent of the instructors had filing cases, but they were desired by forty-two per cent. Provision for bulk supplies was made in sixty-seven per cent of the rooms. Eight per cent more of the teachers desired bulk storage. One-fourth of the teachers had closed shelves for their storage.

Fifty-eight per cent of the schools had kilns (Table 12). Fifty per cent of these were placed in the art room while eight per cent were in the basement. According to the report made by them, the teachers having the kilns in their rooms preferred them in the basement.

Table 13. Floor coverings used and preferred.

Covering	: Have		: Preferred	
	: No.	: %	: No.	: %
Wood	5	41.67	1	8.33
Linoleum	4	33.33	0	0
Asphalt Tile	4	33.33	0	0
Cement	1	8.33	0	0
Rubber-tile	2	16.66	0	0

According to Table 13, forty-two per cent of the class rooms had wooden floors and eight per cent of the teachers wanted them. One third (33 per cent) of the floors were covered with linoleum, one third (33 per cent) with asphalt tile and one sixth (17 per cent) with rubber tile. Only one classroom (8 per cent) had a cement floor.

Table 14. Lighting used and preferred.

Lighting	: Have		: Preferred	
	: No.	: %	: No.	: %
Glass bricks	1	8.33	0	0.0
Bilateral	2	16.66	7	58.33
Deflectors	1	8.33	0	0.0
Florescent	1	8.33	2	16.66
Indirect	4	33.33	1	8.33
2 or more switches	1	8.33	9	75.

Various types of lighting were used with glass bricks, bilateral or florescent lights in eight per cent of the rooms. (Table 14). Indirect lighting was used by seventeen per cent of the schools and deflectors were used by thirty-three per cent.



Fifty-eight per cent of the teachers wanted indirect lighting while seventeen per cent wanted florescent. Only eight per cent of the rooms had two light switches, so that dark areas could be lighted without using all the lights. However seventy-five per cent of the teachers wanted two switches.

Table 14. Window shades used and preferred.

Shades	Have		Preferred	
	No.	%	No.	%
Cloth	3	25.0	5	41.67
Paper	0	0.0	0	0.0
White	0	0.0	1	8.33
Dark	0	0.0	1	8.33
Full window	0	0.0	1	8.33
Half window	1	8.33	5	41.67
Venetian Blinds	5	41.67	0	0.0

Window shades were used in seventy-five per cent of the schools visited (Table 15), with forty-two per cent of the shades being venetian blinds. Eight per cent had half window cloth shades and one fourth (25 per cent) had full window cloth shades. Forty-two per cent wanted cloth shades of the half window type that provide for adjustment at the top and bottom of the window. Only eight per cent desired full length shades. Teachers were equally divided in wanting dark or light shades with eight per cent wanting each.

Table 16. Wall finishes used and preferred.

Wall finishes	: Have :		: Preferred :	
	No.	%	No.	%
Plaster	10	83.33	7	58.33
Tile	1	8.33	3	25.0
Cork and wood	0	0.0	2	16.66

Plaster walls were used in almost all the schools visited (83.3 per cent) while tile was used in eight per cent (Table 16). The majority of teachers preferred plaster but one-fourth (25 per cent) of them wanted tile and seventeen per cent wanted a wood and cork combination.

Table 17. Decoration used in classrooms.

Decoration	: Have :	
	No.	%
Student work	9	75.
Plants	10	83.33
Pictures	9	75.
Curtains	2	16.66
Vases	6	50.0

Decoration within the classrooms consisted of plants, pictures, curtains, vases and student work. Plants were used by eighty-three per cent of the teachers, while pictures and student work were used by seventy-five per cent. Curtains were found in only seventeen per cent of the rooms. Half (50 per cent) of the teachers used vases as a means of decoration (Table 17).

So many recommendations were made by teachers to meet individual needs that the number was not significant enough to be placed in a table. Some changes recommended by the teachers were more and better planning, more room, more storage space, better sinks, movable furniture, natural wood work, display space, tackboard room and a locked personal space for the teacher.

Architects recommendations included lighting, flooring, wall finishes and storage as follows: incandescent or fluorescent lighting with bilateral natural lighting; for the floor, asphalt, rubber or plastic tile; sand finished plaster or glazed tile walls; one architect believed ten per cent of the floor space should be given over to storage while the other suggested one per cent plus locker room which would figure out about the same as the suggestion made by the first architect.

Teachers and architects both wanted light colors in the art classroom and usually preferred pale green. However some wanted very colorful rooms and one teacher would have liked to paint her room red, green, black and various warm colors. But the teachers and architects all wanted a contrast between the walls and ceiling, and the wainscoating and the wall.

Table 18. Administrative offices visited.

School	Number : Students	Number : Rooms	Number : Teachers	Number : Art : Courses	Average : Class : Teacher : Load	Budget	(Supt.) : Optimum : Teacher : Load	(Teacher) : Optimum : Teacher : Load
Abilene High School Abilene, Texas	1340	41	65	3	24	\$300		24
Robert E. Lee, Jr. High San Angelo, Texas	670	28	33	1	28		25	15
San Angelo High School San Angelo, Texas	1104		48	HE VA	30		25	15
Winters High School Winters, Texas	280	12	25	HE VA	28		25	12 - 15
Ballinger High School Ballinger, Texas	321	16	21	4 years	26-28		25	17
Dallas Art Departments Dallas, Texas	-	-	120		28-30	\$3600	20-30	20 - 25

Administrative officers interviewed (Table 18) were three superintendents, two principals and one art supervisor. In Dallas alone there were 120 art teachers but only four schools were visited. The administration was planning a group of standard blue prints for a building program and based the blue prints on a survey just completed as to the workability of the class rooms in use. The preferences from Dallas were the results of that survey. Abilene High School was finishing blue prints for a new building in which a fifty-eight by thirty-two foot room was set aside for art. Robert E. Lee was in the second year of occupancy of a new building that had a very poor art room as stated by the art teacher. San Angelo High School, Winters High School, and Ballinger High School had no provision for art except that in the home economics and vocational agriculture program.

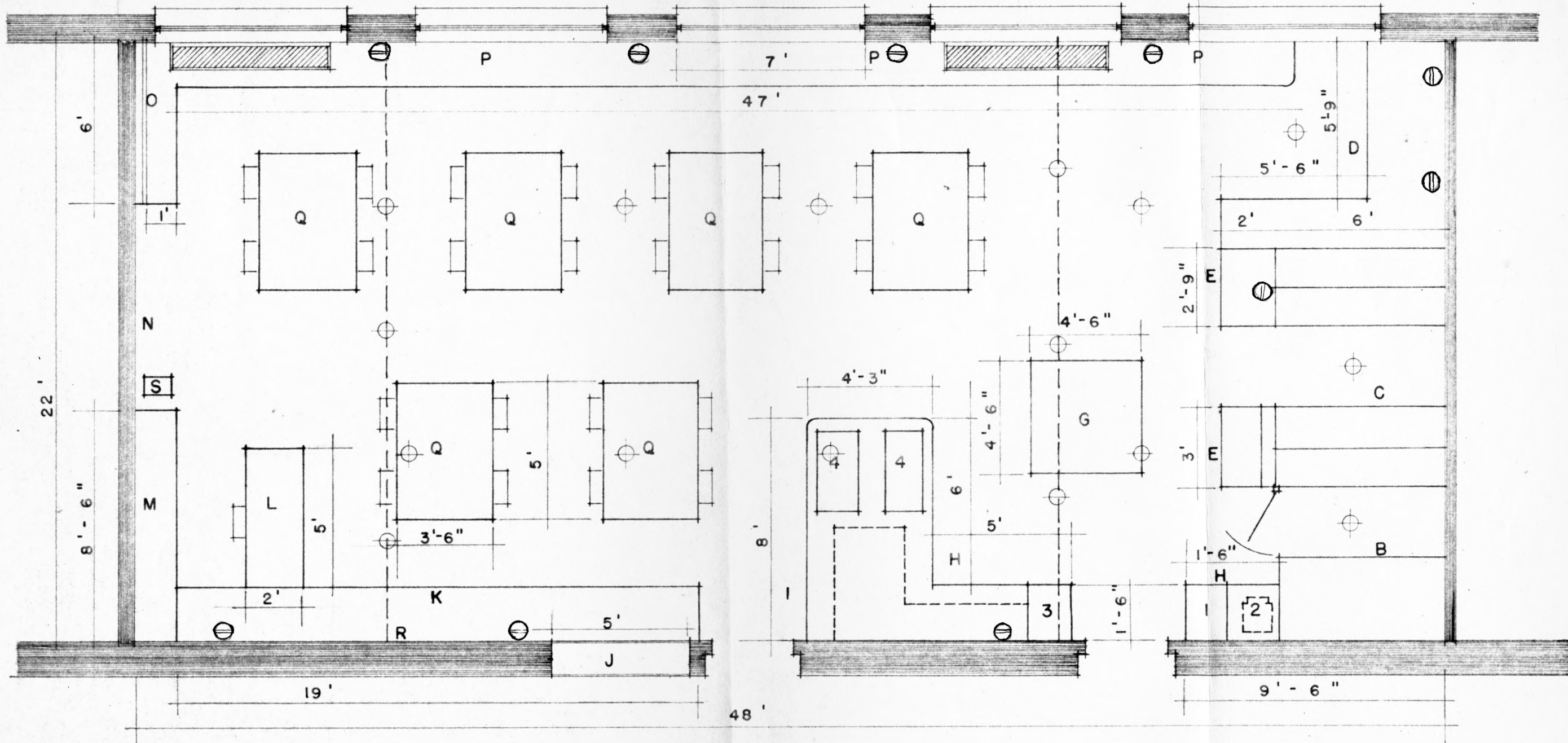
The average teacher load was between twenty-eight and thirty while the average load for the art teachers was eighteen to twenty-four. The teachers when interviewed felt that the most benefit could be achieved in classes of fifteen to twenty usually, while the administration felt that the optimum load for art teachers as well as the other teachers was twenty-five.



EXPLANATION OF PLATE I

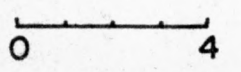
A floor plan for a classroom for high school art.

PLATE I



FLOOR PLAN FOR AN ART CLASSROOM

SCALE IN FEET

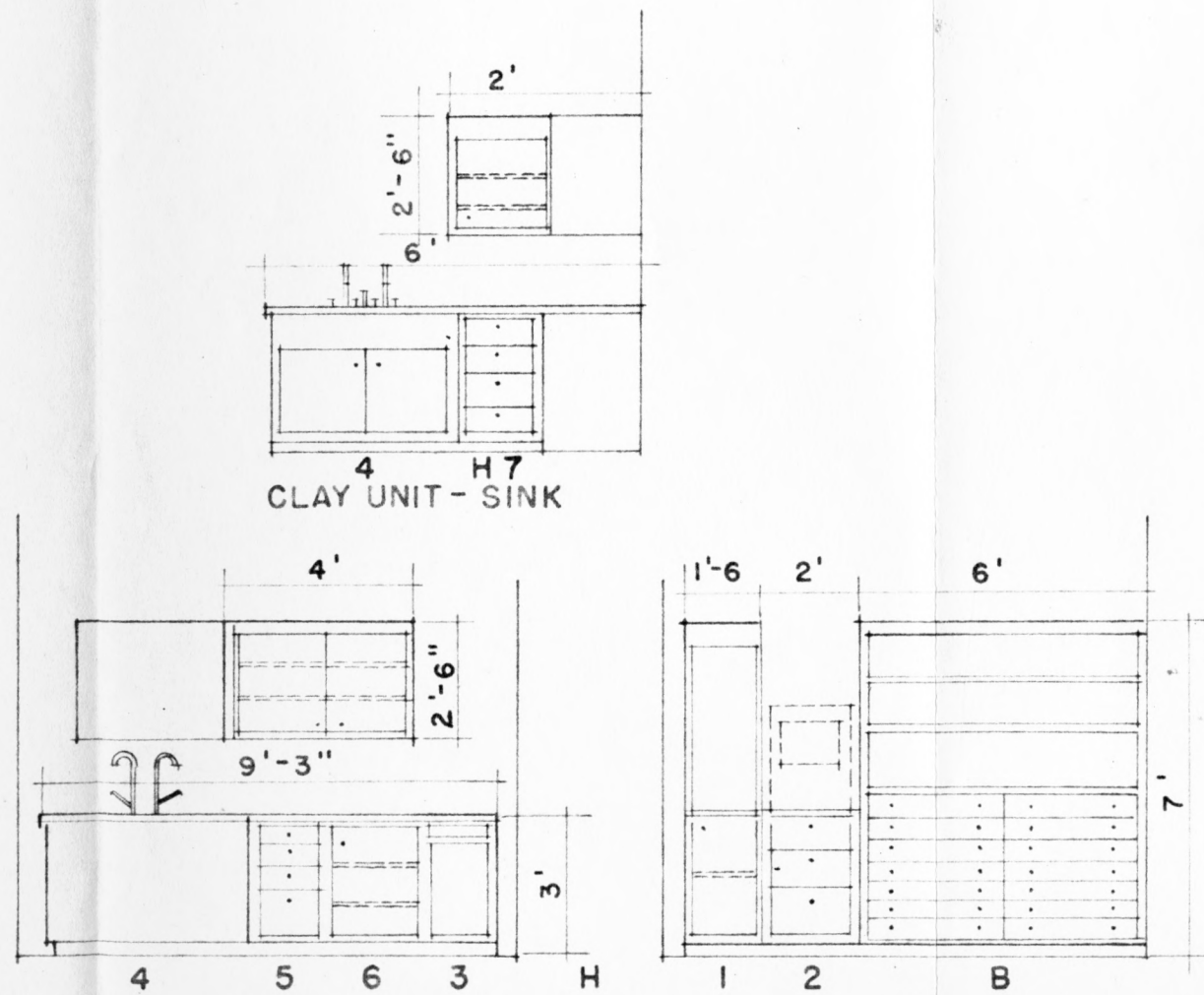
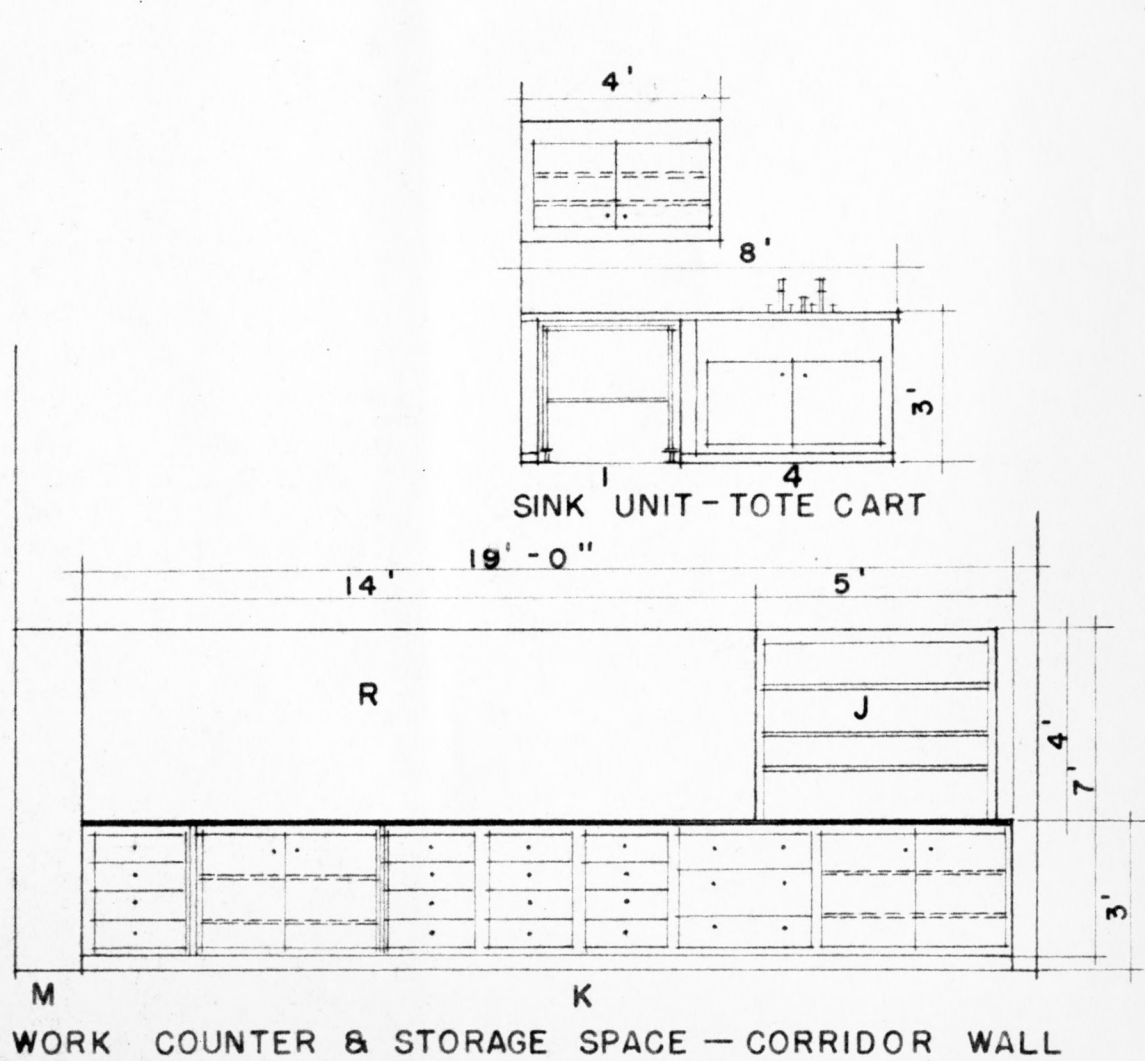
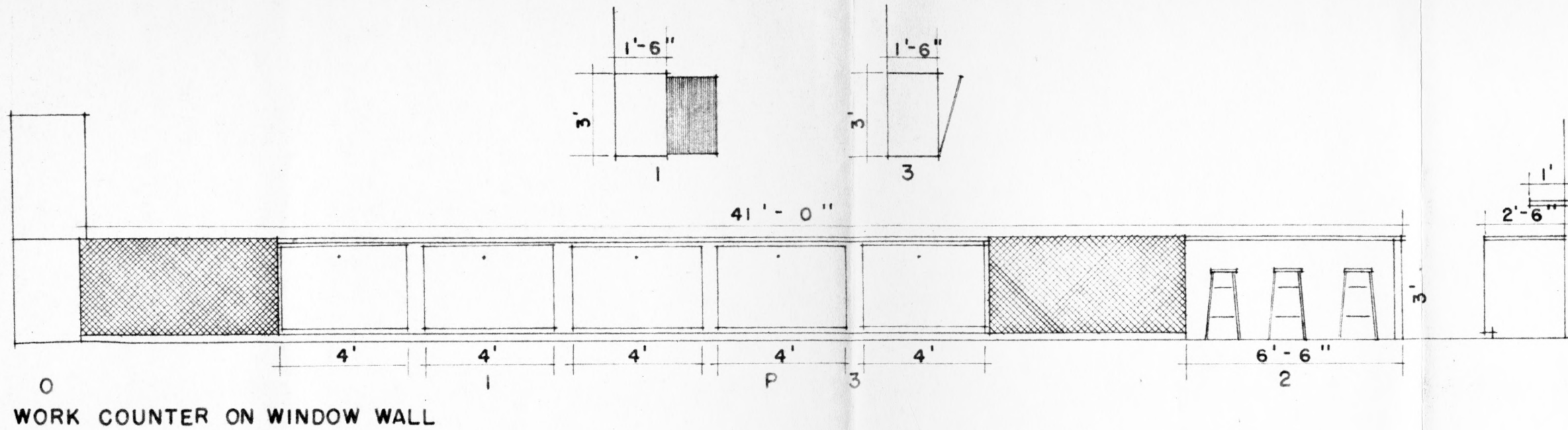


EXPLANATION OF PLATE II

Elevation of equipment on sidewalls of a classroom for  
high school art.



# PLATE II

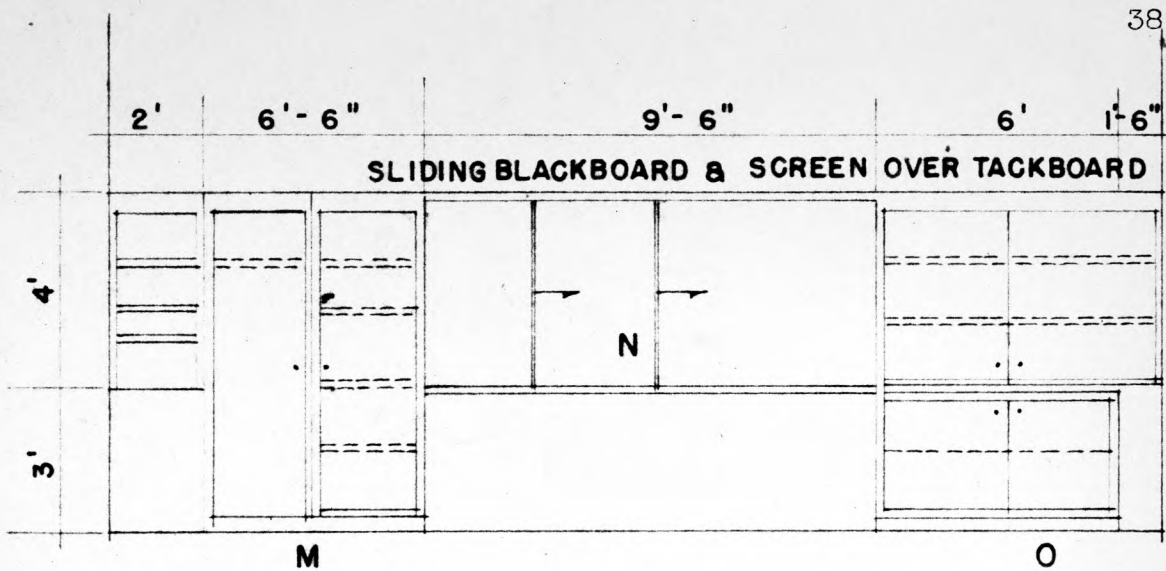


EXPLANATION OF PLATE III

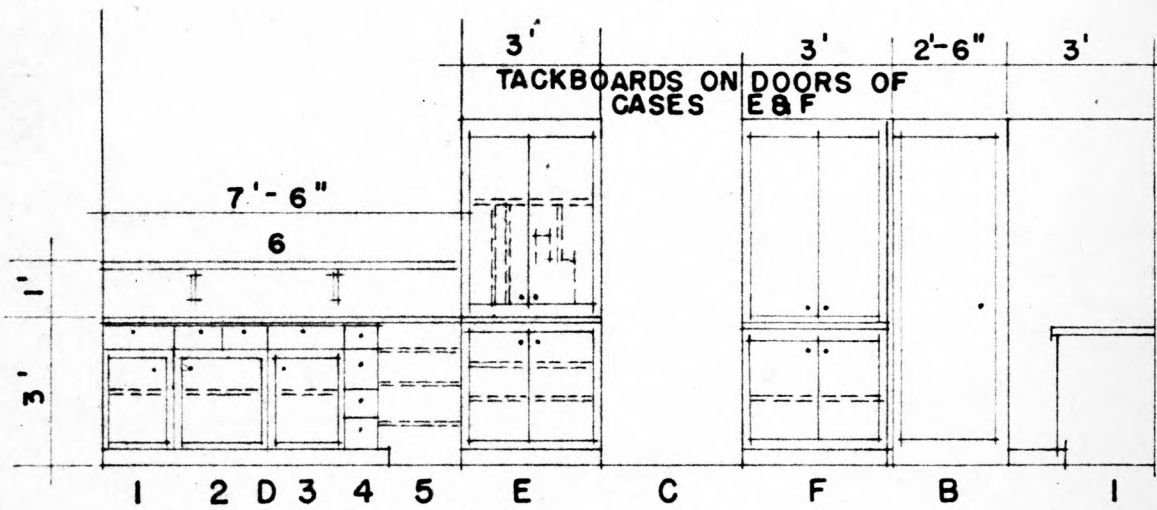
Elevation of equipment on the end walls of a classroom  
for high school art.



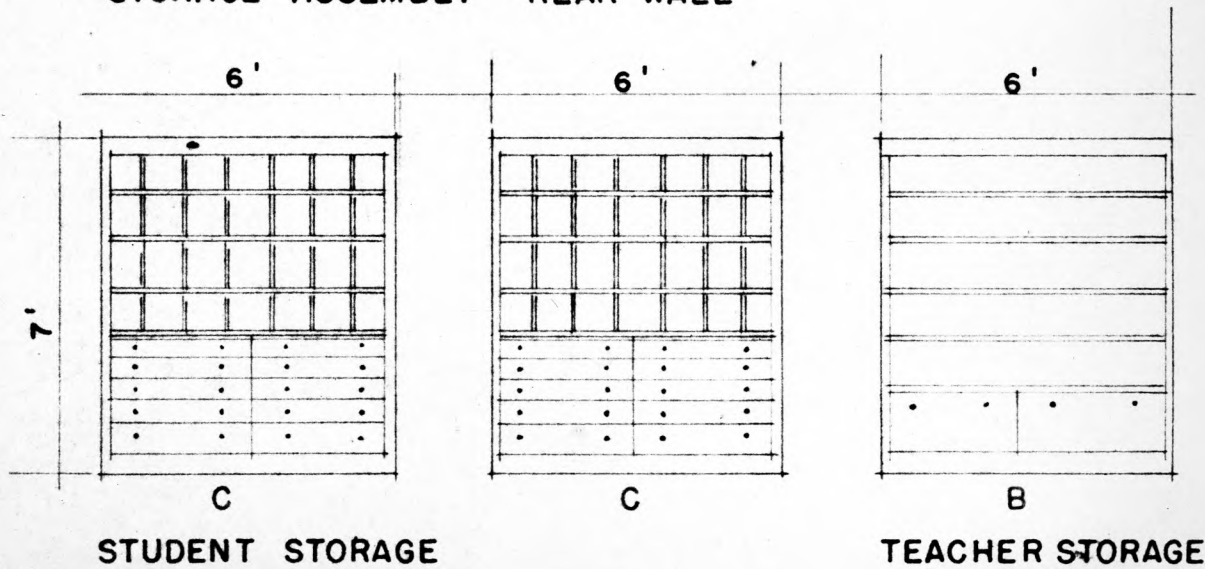
# PLATE III



DISPLAY & STORAGE ASSEMBLY END WALL



STORAGE ASSEMBLY REAR WALL



STUDENT STORAGE

TEACHER STORAGE

## DISCUSSION

### General Characteristics of Art Classroom

The purposes of this study were to provide a floor plan and to suggest furnishings to be used as a guide in planning an adequate classroom for high school art classes, both for the teacher helping plan a new building and for those that were aiding in remodeling an old building. It might also aid in setting up a new art program in a school where art was being taught for the first time.

This floor plan and side elevations were designed with the preferences of the teachers interviewed (Table 12) considered as much as possible. The equipment was selected from the latest designs of leading school furniture companies. The color and finish of the wall, the finish of the floor and equipment, and the suggestions for lighting were those considered best by the school architects and lighting experts as stated in recent professional periodicals and the 1953 National Art Education Association.

The walls were sand finished plaster, painted a pale blue green (6) with a darker value of the same color on the front wall behind the teachers desk. The floors were asphalt tile (Table 13). The equipment and all woodwork were finished in light natural wood (14). The windows were furnished with shades light on the inside and dark on the outside to be used with audio-visual aids (Table 15). The ceiling was acoustical tile as was

recommended by the architects.

The room was planned and arranged to provide for twenty to twenty-four students (Table 18). By care and arrangement ample room was provided for student activities and storage, even though the room is about the size of one and a half usual classrooms and measured only 22 X 48 feet.

According to the standard of 35 square feet per student exclusive of storage (14) a classroom for 24 students should be 840 square feet plus the storage area. This room had 1056 square feet which leaves 216 square feet for storage use. Two hundred and six square feet were used for storage in this plan.

Two three foot doors opened into the hall from the room, one from each major section. The natural lighting was provided by five double windows (7 X 10 feet) on the opposite wall.

#### Arrangement of Equipment

This classroom was designed with two major parts, divided by the sink counter. The end of the room, toward the teacher's desk provided an area (about twenty-two by twenty-eight feet) for lectures and class work as a whole, including painting, drawing, designing, and the table crafts. The screen for audio-visual aid, the black board, and the major portion of the tackboard (N, Plate I) were all in this area. Storage (K, Plate I) was provided for the equipment generally used in that section as well

as personal storage for the teacher (M, Plates I, III) and the teacher's desk (L, Plate I). The instructor's desk was movable and was shown against the corridor wall because by so doing the desk, locker and a small portion of the wall storage unit became the teacher's and provided a little privacy for her at her desk.

The other end of the room (about twenty feet by twenty-two feet) was designed to provide work space and storage room for leather, wood, clay, and metal work. Other crafts could have been carried on in this area when the space and arrangement proved desirable. The clay unit (H, Plates I, II) was on the corridor wall and provided for all the major equipment such as spray hood, kiln, wedging board, potters wheel, and storage room for the smaller tools, all within easy reach of the sink. The wood work bench (G, Plate I) provided a large sturdy work surface for leather and woodwork with easily accessible supply areas. The metal crafts unit (D, Plates I, III) was near the window for better light and provided a work area within easy reach of the main supply source (B,C, Plates I, III).

Most of the supplies were kept in two walk-ins (B,C, Plate I) in the rear wall corner. The student walk in (C, Plate I) had double faced drawers that pulled out and could be taken to any part of the room for distribution of the contents. These could have been individual or class tote drawers as the need arose. It also contained open cubicles for storage of supplies

or of student work in process of completion. The teacher walk in (B, Plates I, III) was locked and it took care of the bulk supplies, illustrative materials and finished student work.

Artificial lights in addition to the Swerivene lights (A Plate I), were indirect and had four switches, two at each door (Table 14). This provided a means of lighting the dark side of the room when the natural light was not enough without turning on the lights next to the windows.

The plans accompanying this study were made with slight regard for budget. However the plans supply a goal or a suggestion for the furnishing of an adequate classroom. The cost of equipment fluctuates to the extent that it was not feasible to include the price in every case.

#### Furnishings and Equipment

The furnishings in the class room as shown on Plates I, II, and III were as follows. Starting at the right lower corner of Plate I the descriptive letters moved to the top of the drawing and down again and on around the room to the left.

Swerivene Lights. Swerivene lights (A, Plate I) were over work centers, in addition to the indirect lighting, to light the close work and displays, These lights were moveable spot lights on a cable so that they could be moved across the room and could be directed where they were needed.



Teacher Storage. The teacher storage (B, Plates I, II, III) was a locked walk in six feet deep with a storage cabinet on either side. One cabinet (B, Plate II) was eighty-four inches tall, thirty-six inches deep and seventy-two inches wide. It had two adjustable shelves and fourteen pullout trays and was used for the storage of bulk supplies of paper up to twenty-four by thirty-six inches. The other cabinet (B, Plate III) was seventy-two inches long, eighty-four inches high and eighteen inches deep. It had four adjustable shelves and two large drawers and was used for the storage of bulk supplies of paints, paste, chalk, crayons as well as for storing illustrative and teacher demonstration materials.

Student Storage. (C, Plate I, III) The student storage for 120 students per day, was a walk in measuring seventy-two inches deep with two cabinets three feet apart. Both cabinets were divided with four shelves and six vertical partitions into twenty-eight cubicles 9 X 12 inches. The lower portion was divided into ten pull out trays. They were used for storing paste jars, brushes, paint jars, water cans, muffin tins, drafting tools, rags, pencils, pens, ink, erasers, tacks, knives, razors, glue, chalk, crayons and a portion of the unfinished work.

Metal Craft. The metal craft center (D, Plates I, III) provided room for six students at a time. It had five base cabinets, all of them were thirty-six inches tall and contained drawers and

shelves for metal equipment. Three cabinets (D-1, 2, 3, Plate III) were thirty inches deep, the center cabinet forty-two inches long (D2) and the other (D 2, 3) eighteen inches in length. They had one adjustable shelf each and drawers. The larger cabinet (D-2) had two drawers and the smaller cabinet (D - 1, 2) had one drawer each. The other cabinet (D-4, Plate III) was a drawer unit with four drawers, nine inches wide. On the back wall (D 6, Plate III) there was a foot wide shelf one and one half feet above the counter. Above this shelf was a tack-board for directions and announcements. On the outside wall of the student storage (D 5, Plate III) there was a sliding door cabinet with three adjustable shelves eighteen inches deep and fifty-two inches long. The cabinet space in this area was used to store candles, metal, tools, steel wool, polish, polisher, pans, heating unit, starch, and student work.

Audio-Visual Cabinet. The Audio visual cabinet (E, Plates I, III) was a case for the projector and reel storage with a moveable table for the projector that slides forward to form a desk for showing movies and slides. The case was eighty-four inches high, twenty-four inches deep and thirty inches wide. One side of the lower part of the cabinet had one adjustable shelves for storing a slide projector and the accessory parts. The other side had pull out slide frames.

Tool Chest. The tool chest (F, Plates I, III) was eighty-four inches tall, thirty-six inches wide and twenty-four inches deep in the lower part and six inches deep in the upper part. The lower case had one adjustable shelf for the large tools and the upper case had hanging space for such things as hammers, saws, levels, screw drivers and drills. (23)

Wood Working Bench. The wood working bench (G, Plate I) was fifty-four inches by fifty-four inches and was thirty-one and a half inches high. Storage area under the bench consisted of four cupboards  $22\frac{1}{2}$  X  $20\frac{1}{2}$  inches X 21 inches high. It had a hard wood top with four vises with three by seven inch jaws that opened to eight and one half inches. The cost of such a table at this date was \$235.00 (7).

Clay Center. The clay center (H, Plates I, II) would provide working space for five to six students at one time. It consisted of storage cabinets, work surface, kiln, hood, wheel, wedging board and sinks. The cabinet holding the kiln (H-2, Plate II) had three drawers twenty-four inches long and eighteen inches deep. The drawers were twelve, ten and a half, and nine inches deep. The hood cabinet (H-1, Plate II) was eighty-four inches high, eighteen inches wide and twenty-four inches deep. The lower part of the case had one adjustable shelf. The wheel cabinet (H-3, Plate II) was thirty inches high, twenty-four inches deep and eighteen inches wide. The lower portion

of the case provided storage for the wheel when not in use. Three base cabinets were thirty-six inches high and twenty-four inches deep. The shelf unit (H-6, Plate II) with adjustable shelves was twenty-four inches long and the drawer units (H-5, 7, Plate II) of four drawers each were eighteen inches long. These took care of storage of the clay tools, rags, scrapers, string, glaze samples, sponges, and brushes. The overhead shelves of wood (H, Plate II) were twenty-four by thirty inches and were sixteen inches deep. The cabinets had sliding doors and two adjustable shelves. The sink unit (H-4 Plate II) measured fifty-four by fifty-four inches and was thirty-six inches high. The steel sink bowls were thirty-six by eighteen by ten inches deep. Fixtures included two swing spouts for hot and cold water and four gooseneck spouts. The storage space under the sink was used for clay crocks and a metal waste paper basket for waste from the craft section of the room.

Tote Cart. The tote cart (I, Plates I, II) was located in the sink unit on the side next to the door. It measured thirty-six inches high by forty-seven inches long by thirty inches and sixteen inches deep, and had sliding doors and two adjustable shelves. There was storage under the sink for water jars and rags.

Current prices for kilns for 14 students were \$125 (1) up to \$910.00 (10) for larger groups, for hoods \$418.00 (3),

for this sink unit by Sheldon (3) \$1115 and, for potter's wheels from \$145.00 (1) to \$295.00 (10).

Glass Display Case. The glass display case (J, Plate I, II) built into the wall between the hall and the classroom was sixty inches long by forty-eight inches high by sixteen inches deep and had three adjustable shelves of glass. This served a double purpose - display in the classroom and corridor and stimulated interest in the passerby in art activities in the classrooms.

Base Cabinets. The base cabinets (K, Plates I, II) were built for storage along the rest of the corridor wall (19 feet). They were thirty-six inches high, twenty-four inches deep with the tops forming a working surface. The individual cabinets were two forty-eight inch out swing door cases with two adjustable shelves, four twenty-four inch drawer cases with four six inch drawers each, and one thirty-six inch case with three eight inch drawers. These were used to store painting and drawing supplies, and unfinished work.

Teacher's Desk. The teacher's desk (L, Plate I) was sixty inches long by twenty-six inches wide and twenty-nine inches high. It had three file drawers and two other drawers (15 $\frac{1}{2}$  X 18 X 6 inches and 15 $\frac{1}{2}$  X 18 X 2  $\frac{3}{8}$  inches). The current price range on desks was from \$68.40 to \$132.40 (17).



Teacher's Locker. The teachers locker (M, Plates I, III) provided for hanging space for wraps and smock as well as shelf space for storage in one half of the case. The over all measurements were eighteen inches deep by fifty-four inches long by eighty-four inches high. The shelf side was twenty-eight inches wide and had four adjustable shelves. Above the base cabinets in the corner were the teachers book shelves, twenty-four inches wide by forty-eight inches high with three adjustable shelves.

Tackboard. The tackboard (N, Plates I, III) was four feet wide and fourteen feet long. Stored behind the book shelves were the black board (four feet by six feet) and an audio-visual screen measuring four feet by six feet that could be pulled out over the tackboard as either one was needed.

Book Case. The closed book case (O, Plates I, III) measured seventy-two inches long by eighty-four inches high by twelve inches deep. It had two adjustable shelves seventy-two inches long and one shelf sixty inches long in the lower cabinet.

Work Counter. The work counter (P, Plates I, II) under the windows was eighteen inches wide, thirty-eight inches high and forty-one feet long. Three pull out tray type storage units (P-1, Plate II) provided for drawing boards twenty-five by forty-seven inches. Three bin type storage units (P-3, Plate II) provided space for finished drawings. Six and three quarters feet on the back end of the counter was left open

under the top to provide knee room for pupils working on stools. The remaining portion of the counter could be used for standing work tasks. The stools when they were not in use were kept under the counter. These stools were twenty-six inches high of metal construction and wooden seats. They were priced at \$6.00 (7). Two six foot spaces covered by grills provided for the radiators.

Student Desks. The student desks (Q, Plate I) were double tables taking care of four students each. They measured sixty inches by forty-two inches on the top and were twenty-nine inches high. The current price of this desk was \$113.00 (3). Desks may be purchased from \$20.55 to \$135.00 (17), according to size construction and materials.

Because the teachers interviewed preferred chairs to stools or benches (Table 12), chairs were used in this room. They were straight back natural finished wood and metal constructed and cost \$7.90 (17). Range of current prices for chairs was from \$5.35 to \$7.90 (17).

Tackboard. A tackboard (R, Plates I, II) ran along the corridor wall from the glass display case to the front of the room. Its measurements were three feet by fourteen feet and was used for display purposes.

Trash Can. The metal trash can (S, Plate I) for waste paper from the lecture and painting area of the room was located next to the teacher's locker.

## CONCLUSION

In recent years the concept of art education has changed to the extent that it can now take a place in general education. Even though the art program has grown, the art classroom in many instances has remained the old conventional room.

Leading architects and educators believed that the art classrooms should be large, more attractive and better furnished for the student to derive the most good from their surroundings. In order that the room can be used to its maximum capacity the teacher should be consulted in the original planning of the art classroom. By interviews with architects, superintendents, and art teachers, their ideas were incorporated in a room to provide adequate working areas, storage space, equipment and furnishings for an art room. It was found that most schools taught drawing, theory and crafts, principle ones being, leather, wood, metal and clay. With this information in mind a floor plan was drawn of a room twenty-two feet wide by forty-eight feet long. The room was planned with a north exposure and with two doors and a glass display window leading into the corriador. The room was divided into two sections with the rear part a craft center and the front area a space for drawing and lecture work. The craft area was sectioned into three major parts and a storage space. One, a metal working counter and storage, second, a wood working bench with adequate storage for tools, and

third, a clay center which was convenient to the sink and included the wheel, hood and kiln. The storage area included two walk ins, one for student storage and the other a locked space for teacher storage. The front part of the room was equipped with six student tables that could take care of four pupils each. The corridor wall was lined with base cabinets for storage and with a tackboard for display above the cabinets. Near the door was an open built-in glass case to provide display space into the hall and classroom. The other wall was provided with a work counter running just under the windows. Under this counter storage space was provided for drawing boards and finished drawings and paintings. The front wall of the room had a book case and a teachers locker on it as well as a tackboard and sliding audio-visual screen and blackboard.

The walls were pale blue green sand finished plaster with a darker value on the endwall. The floor was asphalt tile and the ceiling acoustic tile. The window shades were buff inside and lined in black for darkening the room for movies or slides. All furniture, wood work and equipment were light natural finished wood when possible. The cost of

The cost of the room could be reduced by using less expensive furniture and equipment. Also by eliminating some unnecessary items.

This plan was designed to act as a guide for new classrooms, remodeling old ones and as an adequate room for set-

ting up an art room in a school where art was taught for the first time. However it should be remembered that education is changing year by year and so should any class room. Therefore these plans are a guide and should be changed to meet each new need as it arises.



#### ACKNOWLEDGMENT

Deep appreciation is expressed to Professor Dorothy Barfoot for her help and guidance in the preparation of this thesis.

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APPENDIX

SUPERINTENDENTS AND ART SUPERVISORS

Name:

School:

Position:

- 1. How many students are enrolled in the high school? \_\_\_\_\_
- 2. How many rooms are there in the high school building? \_\_\_\_\_
- 3. How many teachers are employed in the high school? \_\_\_\_\_
- 4. How many art courses are taught in high school? \_\_\_\_\_
- 5. What are they?

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- 6. What is the average teacher load in art classes? \_\_\_\_\_
- 7. What would be the optimum load for art teachers? \_\_\_\_\_
- 8. What provision is made in your budget for art work?(%) \_\_\_\_\_
- 9. How does this compare with amounts spent on music and home economics? \_\_\_\_\_
- 10. From what companies do you purchase classroom furniture and equipment?

Company

Address

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## ART TEACHERS

Name: \_\_\_\_\_

School: \_\_\_\_\_

Title: \_\_\_\_\_

## Classes:

1. How many classes do you teach? \_\_\_\_\_
2. How many pupils do you teach? \_\_\_\_\_
3. What is your average class size? \_\_\_\_\_
4. What are those classes?

<u>Drawing:</u>	<u>Painting:</u>	<u>Carving:</u>
<u>pencil</u>	<u>water color</u>	<u>soap</u>
<u>pen &amp; ink</u>	<u>gouache</u>	<u>wood</u>
<u>charcoal</u>	<u>oil</u>	<u>candlewax</u>
<u>chalk</u>	<u>finger paint</u>	<u>clay</u>
		<u>plaster</u>
		<u>stone</u>
<u>Weaving:</u>	<u>Commerical Art:</u>	<u>Variations:</u>
<u>cardboard</u>	<u>lettering</u>	<u>paper sculpture</u>
<u>loom</u>	<u>posters</u>	<u>paper mache'</u>
	<u>package designing</u>	
<u>Variations:</u>	<u>window display</u>	
<u>embroidery</u>	<u>Graphic Processes:</u>	<u>Crafts:</u>
<u>braiding</u>	<u>stenciling</u>	<u>clay</u>
<u>knotting</u>	<u>block printing</u>	<u>leather</u>
	<u>silk screen</u>	<u>metal</u>
<u>Puppets:</u>	<u>etching</u>	<u>wood</u>
<u>string marionette</u>		<u>glass etching</u>
<u>Hand puppets</u>	<u>Design study:</u>	<u>textile painting</u>
<u>shadow puppets</u>		<u>basketry</u>
<u>masks</u>	<u>Color study:</u>	<u>plastic</u>

5. How many pupils would you like to have in each class?  
 Crafts: \_\_\_\_\_ Drawing: \_\_\_\_\_ Painting: \_\_\_\_\_

## Equipment:

6. What kind and make equipment do you have in your classroom? Mark x for what you have and check (✓) for what you would like to have.

## Desk for students:

<u>metal</u>	<u>single desk</u>	<u>slant top</u>	<u>adjustable</u>
<u>wood</u>	<u>double desk</u>	<u>flat top</u>	<u>stationary</u>
			<u>moveable</u>

## Tables:

<input type="checkbox"/> metal	<input type="checkbox"/> stools
<input type="checkbox"/> wooden	<input type="checkbox"/> single
<input type="checkbox"/> flat top	<input type="checkbox"/> double
<input type="checkbox"/> slant top	<input type="checkbox"/> stationary
<input type="checkbox"/> adjustable	<input type="checkbox"/> moveable
<input type="checkbox"/> chairs	

## Blackboards:

<input type="checkbox"/> Black	<input type="checkbox"/> green	<input type="checkbox"/> how many
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## Bulletin boards:

<input type="checkbox"/> panel around the room	<input type="checkbox"/> moveable	<input type="checkbox"/> cork
<input type="checkbox"/> tripod	<input type="checkbox"/> wall board	<input type="checkbox"/> how many

## Sinks:

<input type="checkbox"/> desk	<input type="checkbox"/> number of sides open
<input type="checkbox"/> wall	<input type="checkbox"/> height of water outlet from base of sink

## Storage:

## Student:

<input type="checkbox"/> lockers	<input type="checkbox"/> metal	<input type="checkbox"/> wood	<input type="checkbox"/> closed	<input type="checkbox"/> open
<input type="checkbox"/> drawers	<input type="checkbox"/> metal	<input type="checkbox"/> wood		
<input type="checkbox"/> shelves	<input type="checkbox"/> closed	<input type="checkbox"/> open		
<input type="checkbox"/> drawing board storage				
<input type="checkbox"/> desk drawers				
<input type="checkbox"/> vertical arrangement				
<input type="checkbox"/> Horizontal arrangement				

## Teacher:

<input type="checkbox"/> filing cases	<input type="checkbox"/> number of drawers
<input type="checkbox"/> bulk supplies	<input type="checkbox"/> shelves

How are your supplies arranged for storage?

Paper \_\_\_\_\_

Paints \_\_\_\_\_

Completed work \_\_\_\_\_

Crafts supplies (leather, clay, wood, metal) \_\_\_\_\_

\_\_\_\_\_

Other provisions for storage:

## 7. Companies where equipment was purchased:

Company	Address
_____	_____
_____	_____

8. Do you have a kiln? \_\_\_\_\_

9. Where is it located? \_\_\_\_\_

Is this a satisfactory location? \_\_\_\_\_

10. Is your equipment arranged around work centers? \_\_\_\_\_

Should it be? \_\_\_\_\_

What different centers do you use? \_\_\_\_\_

## Classrooms:

11. What are the dimensions of your classroom? \_\_\_\_\_

12. What type flooring do you have?

___ wood	___ varnished	___ sheet
___ linoleum	___ inlaid	___ rubber tile
___ asphalt tile	___ waxed	___ oiled
___ cement	___ other types	_____

13. What type would you like to have? \_\_\_\_\_

14. How is your classroom lighted? \_\_\_\_\_

15. How would you like to have it lighted?

___ florescent	___ one switch
___ indirect	___ two or more switches
___ bilateral	___ other ways _____

16. Do your windows have shades? \_\_\_\_\_

If so, what kind? \_\_\_\_\_

Do your windows need shades? \_\_\_\_\_

17. What kind of shades would you like to have?

cloth     white     full window     venetian blinds  
 paper     dark     half window

18. How are the walls finished in your classroom?

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19. What type finish would you like to have?

plaster    ( rough     smooth)  
 acoustic tile     linoleum  
 celetix     glass  
 cork     cement asbestos  
 wood

20. What color scheme is used in your classroom? \_\_\_\_\_

Who planned it? \_\_\_\_\_

21. How would you like to change it?

walls     floor  
 woodwork     ceiling

22. What decorative objects do you use in your classroom?

plants     pictures     vases  
 student work     glass panels     other \_\_\_\_\_

Where do you use them? \_\_\_\_\_

23. What changes would you like to make in your classroom?

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## ARCHITECTS

Name:

Address:

Occupation:

1. What is the average size classroom in high schools? \_\_\_\_\_
2. What do you consider the most adequate means of heating a classroom? \_\_\_\_\_
3. What type of lighting do you feel is most satisfactory? \_\_\_\_\_  
\_\_\_\_\_
4. What type of flooring or floor covering is most practical?  
\_\_\_\_\_
5. What color schemes would you suggest for an art classroom in a high school? \_\_\_\_\_
6. What wall finishes are most often used in schools? \_\_\_\_\_
7. Do you consider this a good type? \_\_\_\_\_
8. What percentage of floor space should be given over to storage? \_\_\_\_\_



THE FURNISHING AND ARRANGEMENT OF A CLASSROOM  
FOR HIGH SCHOOL ART

by

BOBBIE MARIE EOFF

B.S., Abilene Christian College, 1951

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AN ABSTRACT

OF A MASTERS THESIS

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## ABSTRACT

### Introduction

The concept of art education has changed along with that of general education during recent years. It has grown to include many new experiences and to benefit many more people. However, as the subject field has changed the classrooms have often remained the same, in many cases have not even become as modern as the rest of the school building. It was the purpose of this study to plan a workable attractive classroom for art in high schools where the student could learn art principles and techniques in the best environment.

### Method of Procedure

The data for this study were obtained through interviews with teachers of art and home economics, superintendents, an art supervisor, principals and architects. Library references supplied ideas of leading school architects and educators. In addition to the above sources, floor plans of art rooms and equipment catalogs were studied prior to drawing floor plans.

### Findings and Discussion

It was found that one half or more of the teachers interviewed taught pencil and charcoal drawing, loom weaving, mask making, water color and oil painting, lettering, posters, pack-

age design, window display, stenciling, block printing, and etching. Storage space had to be planned for the supplies needed by those classes as well as illustrative materials and bulk supplies. Crafts such as soap carving, clay modeling, paper sculpture, paper-mache', leather tooling, metal design, wood carving, and textile painting also demand provision for storage.

From the interview sheets the type of equipment and furnishings in the classrooms used by the teachers as well as the type they preferred was determined. Taking into consideration the preferences of the teachers, the architects' suggestions and the ideas gained through floor plans and library references, a plan was developed for a room that was 22 by 48 feet with a north exposure. Natural light was supplied by five double windows while artificial lighting consisted of indirect and Swerivene lights. The room was divided into two sections with the one part a craft center and the other area a room for drawing and lecture work. The craft area was sectioned into three major parts plus a storage space: one area was a metal counter and storage space; the second, a wood working bench; and the third, a clay center that was convenient to the sink and included the wheel, hood and kiln. The storage area included two walkins, one for student storage and the other a locked area for teacher storage. In the rest of the room were six student tables and the teacher's desk. The lower part of the side walls were lined with storage cabinets topped by a work counter. On the

corridor wall there was a tackboard and an open built in glass case to provide for display space simultaneously in the hall and in the classroom. On the front wall was a teacher's locker, tackboard with a sliding blackboard and audio visual screen, and a book case.

The walls were pale blue green plaster with a darker value on the endwall. The floor was asphalt tile and the ceiling acoustic tile. The window shades were dark room shades, light on the inside used for darkening the room. All furniture, wood work and equipment was light natural finished wood when possible.

These plans were made with slight regard for a budget, however the cost of the room could be reduced by using less expensive furniture and equipment and by eliminating some less used items.

### Conclusion

This plan was designed to act as a guide for new classrooms and laboratories, for remodeling old ones and as an adequate model for setting up an art room in a school where art was taught for the first time. However, it should be remembered that education is changing year by year and so should any classroom. Therefore, these plans are a guide only and should be changed to meet each new need.