

ABSTRACT OF THESIS

ART PRINCIPLES
AND THEIR APPLICATION TO
LIVING ROOMS

Submitted by
Selen Ruth Starck

In partial fulfillment of the requirements
for the Degree of Master of Education
Colorado
Agricultural and Mechanical College
Fort Collins, Colorado

August, 1960

S-1-08A-18-01-076



U18400 9073717

LIBRARY
COLORADO A. & M. COLLEGE
FORT COLLINS, COLORADO

378.788
a0
1946
1a

ABSTRACT

It has been the writer's experience in the past that not enough emphasis has been placed on art principles as a basis for making proper selection of household furnishings. The homemaking teacher who works in close contact with the home has a splendid opportunity to see the needs of the girls and use this knowledge as a basis for her work on room improvement. One important contribution that a girl can make to society is to create beautiful surroundings for herself, her family, and her community.

The problem

How can the homemaking classes in Carbondale, Illinois, aid girls in making their living rooms more attractive?

Analysis of the problem.--1. What rating scale can be used in evaluating living rooms according to the art principles?

2. How do these living rooms rate according to the rating scale?

3. What can the homemaking courses of Carbondale offer that would help to make these living rooms more attractive?

Method

In order to have a good basis on which to build a practical course in the selection of attractive household

furnishings for the girls at the University High School at Carbondale, Illinois, a survey was made of 50 living rooms. These living rooms were judged by a rating scale devised by the writer and evaluated by several art authorities. Three levels of ratings were used in the scale. If an art principle, or its use in a room element, was considered good by the writer, it was rated three points; if fairly good, two points; if poor, one point.

Upon analyzing the data on the rating scale, it was necessary to give meaning to the judgment of the elements, rated according to the art principles. A descriptive guide of the different levels was set up. The elements were listed in reference to each of the art principles, and a few descriptive phrases were used to describe each element on the rating level, according to the art principles.

Findings

The following numerical values were arbitrarily chosen to give meaning to the average ratings for the different levels. Average ratings from 2.5 to 3.0 were considered good; from 2.4 to 2.0, fairly good; from 1.4 to 1.0, poor.

It was found that the art principles ranked in the following order according to their average ratings: proportion (2.5), first; balance (2.2), second; rhythm (2.1) and harmony (2.1), third; color (1.9), fourth; and emphasis (1.8), fifth.

The averages of the elements judged by each of the art principles in the rating scale were averaged to give the

general impression of each room. Fourteen of the 50 living rooms judged had an average rating of 2.8, or received the highest rating of good, according to the general impression of the room. One half of the rooms visited had an average rating of 2.0, or fairly good, when the general impression of the room was considered, while 10 rooms rated poor with an average rating of 1.3. The arithmetic mean of all the 50 living rooms, as judged by all the art principles, resulted in an average of 2.0.

Discussion

The following discussion shows the strengths and weaknesses found in the selection of furnishings in the homes of the girls at University High School, Carbondale, Illinois, when judged according to the art principles.

The people in the families who had a part in the selection of room furnishings had a better conception of the art principle, proportion, than any of the other five principles. Nearly two thirds of the rooms judged in the survey showed evidences of skill in the application of this principle. Proportion was used with the least skill in the selection of the following elements: design of textiles, pictures and wall hangings, wallpaper patterns, and floor coverings.

In less than half of the living rooms visited by the writer the principle, balance, was used correctly. Sixty-two per cent of the rooms received a high rating for

the balance of architectural features. The ratings for individual elements for balance showed that the arrangement of large furnishings, such as floor coverings and furniture, rated higher than smaller items, such as pictures, lamps, and accessories.

The principle, rhythm, was used with less skill than were balance and proportion. Over half of the rooms rated for this principle fell into the category of fairly good. The elements, architectural features and wallpaper patterns, rated high from the standpoint of rhythm. The principle of rhythm was used least successfully in the selection of textiles, furniture, and lamps.

Harmony is considered the most important of the art principles by various artists. Fifty per cent of the living rooms rated for this principle ranked in the category of fairly good. When the rooms were rated according to individual elements, the results showed that architectural features, furniture arrangement, and wall treatment rated high. Little ability was shown in the selection of the items, furniture, textile designs, pictures, and accessories. Fifty-eight of the rooms rated for the items, textile designs, fell into the category of poor. This was the largest number of rooms to be rated poor when each element was rated according to any principle.

When rating the rooms for the principle, emphasis, value was given to the center of interest created by the grouping of objects, to the use of the unusual, and to the use of decoration. When all the ratings of the elements

were averaged for each of the art principles, emphasis ranked the lowest.

In rating a room according to the art principle, color, it was the color scheme of the entire room that was evaluated. Between 44 and 54 per cent of all the living rooms rated for color, according to the principles, proportion, balance, emphasis, rhythm, and harmony, received the lowest rating, poor. The exposure of the room was also taken into consideration when selecting color. In 68 per cent of the living rooms the colors used indicated that the people were aware of the principle that in rooms with little sunlight warm colors should predominate, and in rooms with a great deal of sunlight cool colors should predominate.

An object in addition to being beautiful should suit the purpose for which it is made. In this study there was a close correlation between the rating of the elements according to utility and the ratings according to art principles. In other words, those persons who selected and arranged objects according to the art principles also considered the principle, utility, and vice versa. This was verified by statistical analysis yielding $r = .89 \pm .021$.

Twenty-nine of the 50 living rooms rated were in homes of people employed in professional work or business. The other 21 were in homes of railroad workers and farmers. Thirteen of the living rooms in the professional homes rated in the top rank, good. In the 21 homes of railroad workers

and farmers only one room ranked in the category of good, the others being fairly good or poor. In both groups there is evident need for improved taste in the selection of furnishings for living rooms.

Recommendations

In view of the findings, it was recommended that the homemaking course at Carbonale, Illinois, be enriched with a thorough study of art principles in relation to the home; that this course emphasize in particular the application of the art principles, rhythm, harmony, emphasis, and color; that this course include activities which will enable the girls to have practical experiences in applying art principles to the furnishings of living rooms.

T H E S I S

ART PRINCIPLES
AND THEIR APPLICATION TO
LIVING ROOMS

Submitted by
Helen Ruth Starck

In partial fulfillment of the requirements
for the Degree of Master of Education
Colorado

Agricultural and Mechanical College
Fort Collins, Colorado

August, 1946

COLORADO AGRICULTURAL AND MECHANICAL COLLEGE

378,788

A O

1946

1

August 1 1946

I HEREBY RECOMMEND THAT THE THESIS PREPARED UNDER MY SUPERVISION BY HELEN RUTH STARCK ENTITLED ART PRINCIPLES AND THEIR APPLICATION TO LIVING ROOMS

BE ACCEPTED AS FULFILLING THIS PART OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION

MAJORING IN HOME ECONOMICS EDUCATION

CREDITS 6

Wanda Williamson
In Charge of Thesis

APPROVED

Herb Healy
Head of Department

Examination Satisfactory

Committee on Final Examination

Wanda Williamson
Arthur P. Pank
Andrew V. Kozak

David H. Morgan

Assistant Dean of the Graduate School

Permission to publish this thesis or any part of it must be obtained from the Dean of the Graduate School.

ACKNOWLEDGMENTS

The writer wishes to express her sincere appreciation to the following persons for their interest and guidance in developing and writing this study:

Dr. Maude Williamson, Professor of Home Economics Education; Dr. David H. Morgan, Director of the Summer Session and Assistant Dean of the Graduate School; Andrew Kozak, and Dr. Everette B. Sackett, Supervisors of Research in Home Economics Education; and Irene Coons, Reference Librarian, all of Colorado Agricultural and Mechanical College, Fort Collins, Colorado; and Miss Rowan Elliff, Supervisor of Vocational Education, Arizona State Teachers College.

4

TABLE OF CONTENTS

<u>Chapter</u>		<u>Page</u>
I	INTRODUCTION	7
	The problem	8
	Analysis of the	
	problem	8
	Delimitations.	8
	Definitions.	8
II	REVIEW OF LITERATURE	9
III	METHODS AND PROCEDURES	19
IV	ANALYSIS OF DATA	23
	Rating of living rooms	
	according to the art	
	principles	24
	Rating of general im-	
	pression of entire	
	room	25
	Average ratings of	
	individual elements	
	rated according to	
	the art principles	26
	Percentage summary	
	of ratings	29
	Rating of living rooms	
	according to the art	
	principle, color	32
	Rating of living rooms	
	according to the art	
	principle, emphasis.	32
	Rating of living rooms	
	according to occupa-	
	tions of parents	34
	Rating of elements of	
	living rooms according	
	to utility	35
	Comparison of living	
	rooms in utility and	
	appreciation of art	
	principles	37

TABLE OF CONTENTS.--Continued

<u>Chapter</u>		<u>Page</u>
V	DISCUSSION.	38
	Proportion	38
	Balance.	39
	Rhythm	40
	Harmony.	41
	Emphasis	42
	Color	42
	Utility.	43
	Occupations.	44
	Recommendations.	44
VI	SUMMARY.	47
	Recommendations.	48
	APPENDIX	49
	BIBLIOGRAPHY.	72

7

Chapter I
INTRODUCTION

In order to see beauty, one must know what makes a thing beautiful. The homemaking teacher must have this knowledge and be able to make her high-school students see that the foundation for good taste is built on art principles. Not only a knowledge of these principles is needed, but also the ability to use them wisely is needed in solving daily problems.

It has been the writer's experience in the past to observe that not enough emphasis has been placed on art principles as a basis for making proper selection of household furnishings. The homemaking teacher who works in close contact with the home has a splendid opportunity to see the needs of the girls and use this knowledge as a basis for her work on room improvement. One important contribution that a girl can make to society is to create beautiful surroundings for herself, her family, and her community.

Therefore, it is a challenge and a duty of the homemaking teacher to find out the needs of the girls in her department, to interpret these needs in art, and to present the required information in a manner that will help solve these problems.

8

The problem

How can the homemaking classes in Carbondale, Illinois, aid girls in making their living rooms more attractive?

Analysis of the problem.--1. What rating scale can be used in evaluating living rooms (a) according to the art principles: proportion, rhythm, balance, emphasis, color, and harmony; (b) according to utility?

2. How do these living rooms rate according to the rating scale?

3. What can the homemaking courses of Carbondale offer that will help to make these living rooms more attractive?

Delimitations.--This study was made from the observation of 50 living rooms in the homes of girls of University High School, Carbondale, Illinois, during the years 1945-46.

Definitions.--The term, living room, in this study is defined as the place where the entire family gathers for purposes of relaxation, conversation, and entertainment of friends.

Chapter II

REVIEW OF LITERATURE

Studies concerned with the importance of teaching home furnishings from the standpoint of art principles are not too numerous. The writer found few studies available that showed the practicability of using an art test to show the art judgment ability of students. The following studies showed that there was a direct relationship between the knowledge of art principles and good taste in household furnishings, and that art tests have been used successfully in judging the art judgment ability of students.

Pettes (14), in 1931, told how she carried out a unit on home furnishings:

The girls mapped out a program which would cover six weeks of study and involved work which could be definitely applied to the room under consideration. The relative merits were studies of different ways and means of ventilating, lighting, and heating rooms and buildings in general and this room in particular. Such floor and wall coverings as paint, varnishes, kalsomines and wall paper were discussed pro and con. Desirable color combinations were analyzed in regard to use, location, size, color combinations obtained through control of hue, value and intensity. Various structural and decorative designs were critically studied to fix principles for achieving beauty through use in harmony, proportion, balance, rhythm, and emphasis, in design. These principles were also applied to a limited critical study of furniture, curtains, rugs, and accessories. Consideration centered in suitability,

orderly design arrangements which followed the lines of the room and balance. (12:1014)

As a result of this work the girls were most enthusiastic to make and carry out plans for redecorating different rooms in their own homes.

Cox (1), in 1932, in an address delivered before the College Arts Association, at the Metropolitan Museum of Art, New York City, stated the following beliefs:

It is the part of common sense to include in the Curricula these branches of culture by which every civilization is ultimately weighed in the balance, and without which no nation can enjoy even economic well-being.

But we would put the case of art on a higher plane than even national pride and national profit. It is an integral part of that vision without which we perish. But the art we teach must function in our homes, in our lives: it must not only fill great museums, it must pervade the world outside also.

After all art must be a religion with us: not a mere tool, a hedonism or an intellectual game for aesthetes. Where is another so pervasive, so potent or so wise and kind? (1:32-33)

At the President's Conference on Home Building and Home Ownership (15), held in 1932, a study of 2,847 families was reported for the purpose of finding the relationship between housing and the lives of the people. After investigating the needs of the different income groups, the committee at this conference made the following analysis in regard to household furnishings.

The higher-bracketed Group II (2000-1500) has many more points of contact than Group I (less than 1500). Schools should offer one of

the best opportunities, and much more can be accomplished through this channel than has been done up to the present. With more adequate information and illustrative material suited to the solution of the problems placed at the disposal of art and home economics teachers, and with opportunities for these teachers to have intensive training in the subject, thousands of homes that are now entirely untouched by the possibilities for better home environment could be helped. There is great need of combined effort to work out practical and satisfactory suggestions for school work in this field, representing this income level. There is also great need of encouraging a better grade of design in furniture and furnishings at this low-cost level. (15:109)

Russell, with Chadderdon (17), at Iowa State College in 1934, used the McAdory Art Test to test the judgment ability in art of students entering home economics. This test was given to 240 students in home economics entering college in the fall and winter of 1932. The test was used when the girls entered college and again after two quarters of applied art courses. The findings indicated the following: (1) ability before they entered school was influenced by such factors as the amount of classroom instruction in art, in the grades and in high school; (2) there was a significant increase in judgment ability during the first two quarters of applied art; (3) judgment ability after two quarters of applied art developed more slowly; (4) the test was not adequate for measuring all the objectives of the course in applied art; (5) the part of the test concerned with shape and arrangement was the least difficult; (6) the part of the test concerned with color appeared to be the

most difficult, and there was no improvement after two quarters of applied art. This may have been due to a lack of validity on this part of the test.

Edmonston (2), in 1936, showed how art learned in the classroom can be made to function in the lives and homes of the students through the use of their home projects in clothing and related arts. These projects were done in the home economics department of the Haynesville High School, Clairborne Parish, Louisiana, during the period of 1933-36. The following conclusions were reached in this study: (1) probably no other subject in high school offers greater opportunity to teach art through the use of home projects; (2) the reason for the difficulty of many high-school girls in making wise decisions in the choice of clothing or home furnishings is that they have not had opportunities to develop judgment ability, owing to the lack of training in art problems; (3) projects involving the use of good taste and judgment are needed in the selection of home furnishings as well as in the selection of clothing. The writer recommended that students should be allowed to select home projects involving art problems that are of interest to them.

Paterson (13), in 1937, stated the following views in reference to the problem of developing judgment in selecting qualities of beauty:

The subtle, unconscious pleasure derived from association with beauty is not easy to measure in its influence on life and happiness.

To understand the merit or demerit of what an artist has created, one need not be a technically skilled artist, but one must have a common denominator by which to measure the kind of excellence which resides in a work of art.

The artistic problem which ever confronts the homemaker lies in the selection of costumes and house furnishings, both of which require a high degree of common sense, first of all in choosing enduring comfortable forms and materials of a character suited to the purpose for which they are purchased. One must learn how to judge whether there is refinement, elegance even, in the cut texture, design and construction of the thing to be purchased.

It is an individual problem for every situation, for no ready-made formula can be evolved, such as a scheme of decoration which is sure to be good in every case. Fortunately many persons are qualified by nature to recognize the fine relationship of proportion in form, color and composition which make for beauty, as in dress or furnishings, painting or sculpture; but any intelligent person can learn to appreciate them. (11:232)

Martens (10), in 1940, studied 290 rural Kansas homes to secure information on home furnishings. The purpose of the survey was to develop a vital program in home furnishings in extension education. The survey included a variety of groups of women, the majority of whose homes were not satisfying in their physical attractiveness. The study showed that the furniture was of poor quality and that accessories were needed to make the homes attractive. Lack of money was the chief reason given for the condition of the furnishings. As a whole, the women desired help in improving the homes.

Neal (12), in 1940, made a survey of rural homes in Kansas for the purpose of obtaining information concerning the home furnishings in rural homes. The data were obtained by means of home visits and personal interviews. About 70 per cent of the group owned their own homes. In general the furniture needed repairs and was not attractively arranged or well chosen. Most of the homemakers were dissatisfied with their furnishings in their present state and were eager to improve them.

Hamilton (5) made a study in 1941, to develop a course of study in related art for use in the vocational homemaking schools in Illinois. In order to determine the type of related art course needed, 20 photographs were taken of interiors of homes of students taking homemaking. These photographs were then judged by a rating scale for the purpose of analyzing the pictures from the standpoint of the application of art principles. Questionnaires were sent out to 11 vocational homemaking teachers in Illinois for the purpose of securing their objectives in related art, their methods used, and the content of their courses. Hamilton concluded that there was a need for an understanding of the content of a related art course by home economics teachers. The results of this study showed that over half of the pictures were rated poor and that in very few homes was there an understanding of the application of art principles.

Hathaway (6), in 1941, surveyed the housing conditions of 200 homes of Iverville Parish, Louisiana, with particular emphasis on the living rooms. The survey was made in order to: secure information upon which home economics courses in housing may be based, determine the relationship between housing conditions and family income, and determine the relationship of living rooms of families to the occupations of the father. The study revealed that (1) housing conditions were more desirable in homes where incomes are high; (2) families in which the fathers followed professional and commercial occupations enjoyed greater advantages in their living rooms; (3) more housing surveys were necessary in order that home economics might function in bettering the housing conditions of its students.

Rhyme (16), in 1941, made a study to measure by pencil and paper tests and analysis of anecdotal records, the development of the individual's appreciation of beauty in environment and human relationships. Material beauty was provided in the cottages where orphanage girls lived and in the home economics department. Tests were given and the results showed that there were gains made in knowledge and ability to apply knowledge; but the joy shown by living in improved surroundings was more significant. Another point brought out by the author was that the eighth-grade girls who lived in the cottages all the time received higher ratings on tests

get this

than did the girls who lived in the usual living arrangements.

Sherrill (18), in 1941, investigated 30 rural families in Kansas. The study showed that much improvement could be made in living centers of low-income groups by elimination, rearrangement, a small expenditure of money, and well-directed effort on the part of the homemaker. A definite need existed for creating beauty in rural homes.

Lowe (9), in 1941, studied the conditions of farm home housing in Georgia county and suggested implications for education in that county. The investigator formulated standards for judging farm houses. One hundred representative homes were then judged in the survey. The results showed that the houses more nearly reached the physiological requirements than the psychological requirements of families.

Hess (7), in 1942, made an attempt to measure, by an objective means, pupil growth in art appreciation developed through certain directed experiences in solving selected problems in home economics. Surveying recent studies, she concluded that home economics teachers set up many desirable art objectives but failed to measure their attainment. In her own study, by administering a pretest and retest, she found significant growth in art appreciation after one year of home economics where stress was placed on art appreciation.

Tyler (19), in 1944, stated the following views on art in high schools:

It is our belief that no matter what our high school boys or girls do in a vocational or professional way when they leave school, their lives will be fuller and richer if they learn to appreciate and understand some of the significant ideals about the home which art offers. All of us live in homes and these homes react upon and condition our behavior. We need to teach our pupils how the art of the home is related to immediate American life. Appreciation of art helps to make living itself an art.

The purpose of high school art lessons should be to help the pupil enjoy and recognize the world of beautiful things about him and help him gain appreciation which will reflect beauty in his life and living. Art lessons should specifically aid in developing good taste by helping the pupil cultivate the habit of thoughtful consideration before making decisions which involve judgements and choices in selection and arrangement of things connected with his daily life. (15:233)

Goldstein (4), in 1944, stated:

If we are to contribute what we should to the postwar period, we must also teach students to recognize sincerity in modern as well as in traditional designs, whether in simple homemade furnishings or in larger and handsomer interpretations of the new designs. We should lead them to see that there can be sincerity, individuality, and a homelike quality in modern as well as in traditional houses.

When students have learned to make art a part of everything they do, they have also built up their own morale. They can find more ways to be happy with the things they can afford to have, and they know how to make use of art to raise their standards of living even though they have fewer material things than they used to think they needed.

If we can prepare people for discriminating choices among the products which will be placed before them in the post war world, we can feel that related art has made a significant step

18

toward raising the level of taste in our country.
(36:552)

Meshke (11), in 1945, stated her philosophy of a related art program.

The rationale for the related art emphasis in the home economics program at Butler University was simply and sincerely expressed by a freshman dietetics major recently: "The principles of art should be in everything we do and see."

That members of the home economics staff subscribe to that philosophy is apparent from the following examples of goals which they have set up as desirable for their students: To plan and manage time and work with increasing maturity, to work cooperatively with others, to evaluate one's progress critically, to carry through assignments and obligations systematically, and to express good taste in personal grooming and tact in relationship with others.

Obviously, in order to attain such goals the principles of balance, proportion, harmony, emphasis, and rhythm must be in operation. This belief permeates the program of the home economics department at Butler University but finds its most direct and tangible expression, naturally, in such courses as Principles of Art, Interior Decoration, Historic Costume, Costume Design, Textiles, Clothing Construction, and the freshman course Introduction to Home Economics. (37:335)

Some of the outcomes of the courses were: to judge objectively, to make independent choices and justify them, and to evaluate continuously the efforts of others.

Chapter III

METHODS AND PROCEDURES

In order to have a good basis on which to build a practical course in the selection of attractive household furnishings for the girls at the University High School at Carbondale, Illinois, a survey was made of 50 living rooms. The purpose of the survey was to rate the elements found in the rooms according to the art principles.

In the year 1945-46, the writer made appointments to visit the various homes of the girls in her homemaking department and other girls in the high school. The girls knew the purpose of the visit, and the writer checked the rating scale at the time of the visit.

In setting up a rating scale many art books were reviewed by the writer. After observing how the authors dealt with interior furnishings from the standpoint of art principles, the writer decided that the following elements would be judged in each living room: architectural features, furniture, furniture arrangement, design of textiles, draperies, lamps, floor coverings, wall treatment, and accessories. These elements were judged according to the following art principles: proportion, rhythm, balance, emphasis, color, and harmony.

If the element was considered good by the writer, it was rated three points; if fairly good, two points, and if poor, one point. If the item was lacking, it was rated 0.

The writer found upon analyzing the data on the rating scale 1/ that in order to give meaning to the judgment of the elements, rated according to the art principles, as good, fairly good, and poor, a descriptive guide of the different levels should be set up 2/. With the aid of this descriptive guide it was possible to rate the living rooms more objectively.

Upon further examination of the data it was found that some interpretation had to be given to average ratings. The following numerical values were arbitrarily chosen to give meaning to these averages. Average ratings from 2.5 to 3.0 were considered good; from 2.4 to 1.5, fairly good; and from 1.4 to 1.0, poor.

In judging the elements according to the principle, utility, consideration was given mainly to the evident practicability of the room furnishings. The utility rating scale 3/ and its descriptive guide for the different levels 4/ were used in judging the living rooms for this principle of suitability.

1/ See Appendix A.

2/ See Appendix B.

3/ See Appendix C.

4/ See Appendix D.

To test the usability of the rating scale, the writer judged a living room in Fort Collins, Colorado. The rating scale was then evaluated by members of the class in educational research and by members of a related art class at Colorado Agricultural and Mechanical College in the summer of 1944. No changes were made in the rating scale as a result of these evaluations.

After 50 homes were visited and the living rooms judged, the results were tabulated on a master sheet. These data were analyzed from the following viewpoints:

1. The average ratings of the art principles found in the 50 living rooms.
2. The ratings, according to the art principles, of the elements present in the rooms.
3. The ratings of the elements in the rooms according to the principle, utility. To compare the ratings of the 50 living rooms in art principles and utility of elements in the room, a rank-order arrangement was constructed for the 50 rooms ^{5/}. The rank-order coefficient of correlation (r_s) was computed.
4. The ratings of the living rooms according to the occupations of the parents.

From the analysis of this information, recom-

^{5/} See Appendix E.

mendations have been made for a course in home furnishings for the girls at Carbondale University High School.

LIST OF TABLES

ANALYSIS OF DATA

<u>Table</u>		<u>Page</u>
1	RATING OF 50 LIVING ROOMS on the rating scale ACCORDING TO ART PRINCIPLES	25
2	RATING OF GENERAL IMPRESSION OF 50 LIVING ROOMS.	26
3	AVERAGE RATING OF INDIVIDUAL ELEMENTS, RATED ACCORDING TO ART PRINCIPLES	29
4	PERCENTAGE SUMMARY OF RATINGS OF 50 LIVING ROOMS.	31
5	RATING OF 50 LIVING ROOMS ACCORDING TO THE ART PRINCIPLE, COLOR.	33
6	RATING OF 50 LIVING ROOMS ACCORDING TO THE ART PRINCIPLE, EMPHASIS	34
7	RATING OF 50 LIVING ROOMS ACCORDING TO THE OCCUPATIONS OF THE PARENTS.	35
8	RATING OF ELEMENTS OF 50 LIVING ROOMS ACCORDING TO UTILITY.	36

6. Distribution of the ratings of the living rooms according to the art principle, emphasis.

7. Distribution of the ratings of the living rooms according to the occupations of the parents.

8. Distribution of the ratings of the living rooms according to the principle, suitability.

Chapter IV
ANALYSIS OF DATA

The analysis of the data on the rating scale used in judging the living rooms will be presented in the following order:

1. Distribution of the average ratings of living rooms according to the art principles.
2. Distribution of the average ratings of living rooms according to the general impression.
3. Distribution of the average ratings given to the elements found in the living rooms and rated by the art principles.
4. Percentage summary of the living rooms rating good, fairly good, and poor, according to the art principles, proportion, balance, rhythm, and unity.
5. Distribution of the ratings of the living rooms according to the art principle, color.
6. Distribution of the ratings of the living rooms according to the art principle, emphasis.
7. Distribution of the ratings of the living rooms according to the occupations of the parents.
8. Distribution of the ratings of the living rooms according to the principle, suitability.

9. The correlation of the ratings of the 50 living rooms between suitability and the general impression.

Rating of living rooms
according to the art
principles

The art principles used in rating the 50 living rooms showed average ratings, Table 1, which ranked as follows: proportion, first; balance, second; rhythm and harmony, third; color, fourth; and emphasis, fifth. Proportion was the only art principle rating in the top category, good, according to the average ratings. The other five art principles were in the fairly good category.

Sixty-four per cent of the living rooms rated good according to the art principle, proportion. Only one of the 50 living rooms received the rating of poor.

About one half of the rooms were judged either good or fairly good according to the art principle, balance. Only five rooms rated poor.

Twenty-eight per cent of the living rooms rated good according to the art principle, rhythm. Over half of the rooms (54 per cent) rated fairly good. Eighteen per cent rated poor.

When judged from the standpoint of the art principle, harmony, 30 per cent of the rooms rated good; 52 per cent rated fairly good; while eighteen per cent rated poor.

About one out of every three rooms was given the top rating according to the art principle, color. Forty-four per cent of the 50 rooms rated poor.

Approximately one third of the rooms received the highest rating when judged according to the art principle, emphasis. Over half (54 per cent) received the lowest rating.

Table 1.--RATING OF 50 LIVING ROOMS ACCORDING TO ART PRINCIPLES.

Art Principle	Ratings							Total
	Aver- age	Good		Fairly Good		Poor		
		Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	
Proportion	2.5	32	64	17	34	1	2	100
Balance	2.2	23	46	22	44	5	10	100
Rhythm	2.1	14	28	27	54	9	18	100
Harmony	2.1	15	30	26	52	9	18	100
Color	1.9	16	32	12	24	22	44	100
Emphasis	1.8	17	34	6	12	27	54	100

Rating of general
impression of
entire room

The averages of the elements judged by each of the art principles in the rating scale were averaged to give the general impression of each room. The number of living rooms rated good, fairly good, and poor are shown in Table 2.

Twenty-eight per cent of the 50 living rooms judged had an average rating of 2.8, or good, according to the general impression of the room. One half of the rooms visited had an average rating of 2.0, or fairly good. Ten rooms rated poor, with an average rating of 1.3.

The arithmetic mean of all the 50 living rooms as judged by all the art principles resulted in an average of 2.1.

Table 2.--RATING OF GENERAL IMPRESSION OF 50 LIVING ROOMS.

Total Aver- age Rating	Ratings								
	Good			Fairly Good			Poor		
	Num- ber	Per Cent	Aver- age	Num- ber	Per Cent	Aver- age	Num- ber	Per Cent	Aver- age
2.1	14	28	2.8	26	52	2.0	10	20	1.3

Average ratings of indi-
vidual elements rated
according to the art
principles.

In each living room there was a possibility of rating 11 elements or items. Although some of the items on the rating scale were not found in every living room that was judged, Table 3, the average ratings were given of the items that were present in the living rooms as judged according to the art principles on the rating scale.

Draperies ranked first, having an average rating of 2.8, according to the art principles used in the

rating scale. However, of the 50 living rooms rated, a total of 28 (56 per cent) did not possess draperies in the living-room furnishings.

Ranking second in evaluation based on the art principles of the scale was the item, wall treatment. Eighty-four per cent of the 50 living rooms investigated obtained the highest rating possible in the scale, while only four of the 50 living rooms received the lowest.

Third in rank, with an average rating of 2.6, was the element, architectural features, which received the highest rating of good in 66 per cent of the living rooms. In only two of the living rooms was this element rated as poor.

Ranking fourth in the evaluation based on the art principles of the rating scale was the element, floor coverings. Two out of every three living rooms rated good. Only six were given the lowest rating.

As determined by their average ratings, the elements, draperies, wall treatment, architectural features, and floor coverings, were the only elements of the 11 which rated in the top category of the evaluation scale; that is, 2.5 to 3.0, defined as good in this study.

The items, wallpaper pattern, accessories, lamps, and furniture arrangement, all received the average rating of 2.3. Fifty-seven per cent of the 30 living rooms with papered walls received the rating of

good. Five of the rooms rated poor according to the art principles in the rating scale. Twenty-four of the 48 living rooms with accessories were given the top rating; 10, the lowest. Twenty-three of the 48 living rooms containing lamps rated good; only four rooms rated poor. Forty-four per cent of the rooms rated for the item, furniture arrangement, received the highest rating; nine rooms, the lowest rating.

The furniture itself judged as a separate item according to the art principles had an average rating of 2.2. In 11 of the 50 rooms the rating was good. Thirty-one were in the category of fairly good, which was the greatest number of rooms to have an average rating of fairly good for any one element judged by the art principles. Eight were judged to be poor.

The element, pictures and wall hangings, received the numerical average of 2.1. Two out of every five of the 43 rooms possessing this item received the rating of good; 30 per cent rated poor.

Lowest in rank, with an average rating of 1.9, was the item, design of textiles. Sixteen of the rooms with textile designs received the lowest rating on the scale. Only nine of the 50 living rooms judged received the highest rating of good.

The last seven elements discussed, when evaluated according to the art principles, indicated average ratings in the fairly good category, 1.5 to 2.4.

No element included in the scale and found in the living rooms fell into the lowest rating, 1.0 to 1.4.

Table 3.--AVERAGE RATING OF INDIVIDUAL ELEMENTS, RATED ACCORDING TO THE ART PRINCIPLES.
(N=50)

Elements	Num-ber of Rooms	Av-er-age	Ratings							
			Good		Fairly Good		Poor		Lacking	
			3.0-2.5	2.4-1.5	1.4-1.0					
			Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent
Draperies	22	2.8	19	86	3	14			28	56
Wall Treatment	50	2.7	42	84	4	8	4	8		
Architectural Features	50	2.6	33	66	15	30	2	4		
Floor Coverings	50	2.5	33	66	11	22	6	12		
Accessories	48	2.3	24	50	14	29	10	21	2	4
Lamps	48	2.3	23	48	21	44	4	8	2	4
Furniture Arrangement	50	2.3	22	44	19	38	9	18		
Wallpaper Pattern	30	2.3	17	57	8	27	5	16	20	40
Furniture	50	2.2	11	22	31	62	8	16		
Pictures and Wall Hangings	43	2.1	16	37	14	33	13	30	7	14
Design of Textiles	50	1.9	9	18	25	50	16	32		

Percentage summary of ratings

The percentage summary of the ratings of the 11 elements according to the art principles, proportion, balance, rhythm, and unity, Table 4, indicated that the

item, architectural features, was judged good in two thirds (66 per cent) of the homes.

The element, furniture, when rated according to proportion received the rating of good in 78 per cent of the living rooms, but when rated for rhythm and unity, the majority of the homes (76 per cent) fell into the two lower ratings.

One half of the furniture arrangements in the living rooms was given the highest rating according to the art principle, balance. When judged according to rhythm and unity, the distribution of the number of living rooms rating good and fairly good was evenly divided (40 per cent). Twenty per cent rated poor in rhythm; and 18 per cent, poor in unity.

The design of textiles in 64 per cent of the rooms ranked in the category of good according to the art principle, proportion. Over one half of the textiles received the lowest rating, poor, in achieving an effect of rhythm and unity.

The proportion of the pictures and wall hangings was considered good in 49 per cent of the rooms. In about two out of every five rooms the balance and unity of the pictures were rated poor.

Three fourths of the lamps found in the homes rated good according to the art principle, proportion. About one third was poor in rhythm and balance.

The floor coverings in two out of every three

rooms were considered good in proportion and balance.

Fifty-three per cent of the living rooms were rated good, according to the proportion and rhythm principles, for wallpaper.

When judged according to proportion, the accessories in 73 per cent of the rooms received the highest rating. Over half of the accessories in the rooms were in the category of fairly good and poor when judged according to the art principles rhythm and balance.

Table 4.--PERCENTAGE SUMMARY OF RATINGS OF 50 LIVING ROOMS.

Elements	Ratings											
	Good				Fairly Good				Poor			
	P	B	R	U	P	B	R	U	P	B	R	U
Architectural Features	66	62	66	66	32	32	28	28	2	6	6	6
Furniture	78		24	24	20		42	38	2		34	38
Furniture Arrangement		50	38	42		36	42	40		14	20	18
Design of Textiles	64		18	14	22		26	28	14		56	58
Draperies	86				14							
Pictures and Wall Hangings	49	30		35	37	30		21	14	40		44
Lamps	77	46	30		19	25	33		4	29	37	
Floor Coverings	62	62			22	24			16	14		
Wallpaper Pattern	53		53		23		30		23		17	
Wall Treatment				84					8			8
Accessories	73	48		44	19	25		23	8	27		33

Key: P-Proportion; B-Balance; R-Rhythm; U-Unity

Rating of living rooms
according to the art
principle, color

The color scheme of the entire room in each home was judged according to the art principles, harmony, rhythm, proportion, emphasis, and balance. The choice of color for the exposure of the room was also rated, Table 5.

Nineteen of the 50 living rooms had color schemes that were judged good according to the art principle, harmony. Forty-four per cent of the rooms received the rating of poor.

In expressing rhythm by means of color, 30 per cent of the rooms received the top rating, while about half (46 per cent) ranked in the lowest category.

When the color schemes in the living rooms were judged according to the art principles, proportion, emphasis, and balance, the distribution showed that one out of every four rooms rated good; 54 per cent rated poor.

Twenty-nine of the 50 living rooms rated good in using the proper color for the exposure of the room. About two out of every five received the lowest rating.

Rating of living rooms accor-
ding to the art principle,
emphasis

When the 50 living rooms were rated according to the art principle, emphasis, each room was judged as

Table 5.--RATING OF 50 LIVING ROOMS ACCORDING TO THE ART PRINCIPLE, COLOR

Principles	Ratings						Total
	Good		Fairly Good		Poor		
	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent	
Harmony in Color Scheme	19	38	9	18	22	44	100
Rhythm in Color Scheme	15	30	12	24	23	46	100
Proportion in Color Scheme	14	28	9	18	27	54	100
Emphasis in Color Scheme	14	28	9	18	27	54	100
Balance in Color Scheme	14	28	9	18	27	54	100
Exposure	29	58	1	2	20	40	100

a whole in order to determine whether emphasis was obtained by means of a center of interest resulting from grouping of objects, the use of the unusual, the use of decoration, Table 6.

One out of every four rooms was rated good in securing emphasis by the grouping of objects. Twenty-seven (54 per cent) of the 50 rooms were rated poor.

Five rooms rated good in using the unusual as a means of obtaining emphasis. Fifty-four per cent of the rooms received the lowest rating.

Only one room received the highest rating in creating emphasis by the use of decoration. Fifty-four per cent rated poor.

Table 6.--RATING OF 50 LIVING ROOMS ACCORDING TO THE ART PRINCIPLE, EMPHASIS

Principle	Ratings					
	Good		Fairly Good		Poor	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Grouping of Objects	12	24	5	10	27	54
Use of Unusual	5	10			27	54
Use of Decoration	1	2	1	2	27	54

Rating of living rooms according to occupations of parents

The number and distribution of the living rooms rated good, fairly good, and poor, according to the occupations of the parents are shown in Table 7.

In 15 of the 50 families either the mother or father was engaged in some professional work, such as, teacher, doctor, or minister. Eight of the living rooms in this group were rated good according to the art principles in the rating scale. Only one room received the rating of poor.

Either the mother or father in 14 of the families was engaged in some type of business. Five living rooms found in the homes of these families rated good. Three were in the lowest rating.

The fathers in 15 of the families were employed as railroad workers. Only one of the living rooms in this particular group was judged good; 10, fairly good; and four, poor.

Six out of the 50 families were engaged in farming. Not one of the six living rooms in these homes was rated good. Four of the living rooms received the rating of fairly good, while two were rated poor.

Table 7.--RATING OF 50 LIVING ROOMS ACCORDING TO THE OCCUPATIONS OF THE PARENTS.

Occupations	Ratings					
	Good		Fairly Good		Poor	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Professions (Teacher, Doctor, Minister, etc.)	8	16	6	12	1	2
Business	5	10	6	12	3	6
Railroad	1	2	10	20	4	8
Farmer			4	8	2	4

Rating of elements of living rooms according to utility

According to the rating scale, it was possible to rate eight elements in the 50 living rooms according to the principle, utility. All the living rooms did not have all these elements in their room furnishings. Table 8 shows the number and percentage of the rooms having these elements and their ratings according to the principle, utility, as defined in the rating scale.

Between 50 and 80 per cent of the rooms containing the elements, draperies, wall treatment, floor coverings, and lamps, rated good according to the

principle, utility.

Forty-four per cent of the living rooms containing accessories rated good when the objects were considered in reference to their utility. One fourth of the rooms rated poor.

Fifteen (35 per cent) of the 43 rooms containing pictures and wall hangings ranked poor when considered according to utility. Thirty-seven per cent of the rooms rated good.

The furniture in two out of every three rooms rated fairly good when judged according to the principle, utility. Only one room rated poor.

Fabrics with textile designs were present in all the 50 rooms. Thirty-eight per cent of the rooms received the lowest rating, poor, according to the principle, utility. Nine received the highest rating, good.

Table 8.--RATING OF ELEMENTS OF 50 LIVING ROOMS ACCORDING TO UTILITY.

Elements	No. of Liv- ing Rooms	Ratings							
		Good		Fairly Good		Poor		Lacking	
		Num-Per berCent	Num-Per berCent	Num-Per berCent	Num-Per berCent	Num-Per berCent	Num-Per berCent		
Draperies	22	17	77	5	23			28	56
Wall Treatment	50	37	74	6	12	7	14		
Floor Covering	50	27	54	16	32	7	14		
Lamps	48	24	50	15	31	9	19	2	4
Accessories	48	21	44	15	31	12	25	2	4
Pictures and Wall Hangings	43	16	37	12	27	15	35	7	14
Furniture	50	16	32	33	66	1	2		
Design of Textiles	50	9	18	22	44	19	38		

Comparison of living rooms
in utility and appreciation
of art principles

The rank-order coefficient of correlation (r_1)^{1/} was computed to be .89 with a probable error of .021, showing a very high positive correlation between the application of the art principles and the utility of the elements which were judged according to the art principles and found in the 50 living rooms.

^{1/} See Appendix E

Chapter V

DISCUSSION

This study was made in order that the writer might have some tangible information about the furnishings of living rooms in Carbondale. These furnishings were judged from the standpoint of the art principles to answer the problem, How can the homemaking classes in Carbondale, Illinois, aid girls in making their living rooms more attractive? The writer believed that a course in home furnishings should be based on a knowledge of the art principles and their practical application in homes.

The following discussion showed the strengths and weaknesses found in the selection of furnishings in the homes of the girls of University High School, when judged according to the art principles.

Proportion

The members of families who had a part in the selection of the room furnishings had a better conception of the art principle, proportion, than any of the other five principles. When the ratings of all the living rooms were averaged for each of the art principles, proportion was the only one to rank in the highest bracket, good, (2.5 to 3.0). Nearly two thirds

of the rooms judged in the survey showed evidences of skill in the application of this principle. Only one room was rated poor.

The individual ratings of each element in this study indicated that proportion was used with the least skill in the selection of the following elements: design of textiles (14 per cent poor), pictures and wall hangings (14 per cent poor), wallpaper pattern (23 per cent poor), and floor coverings (16 per cent poor).

Balance

In not quite half the living rooms visited by the writer was the principle, balance, used correctly, and in 40 per cent of the rooms a fair attempt had been made at using this principle successfully.

In analyzing the ratings for the application of balance to the individual elements, it was noted that 62 per cent of the rooms received a high rating for the principle of balance applied to architectural features. This was perhaps due to the ability of the people who planned or built the houses rather than to that of individual family members.

The ratings of individual elements for balance showed that the arrangement of large furnishings, such as floor coverings and furniture, rated high, but the arrangement of smaller items, such as pictures, lamps, and accessories, rated low, indicating that there was more skillful arrangement of larger objects than of

smaller ones. Between 30 and 40 per cent of the rooms received low ratings when these small items were considered. This distribution of ratings on furnishings may be due to the fact that most of the large furnishings were arranged according to formal balance. In the case of the smaller accessories, some attempt was made to use informal balance, which is a more subtle arrangement and more difficult to produce.

Rhythm

The principle, rhythm, was applied with less skill than were balance and proportion. Just a fair understanding of rhythm was evident in the rooms surveyed. Over half of the rooms rated for this principle fell into the category of fairly good.

When the elements in the rooms were judged from the standpoint of rhythm, high ratings were given to architectural features and wallpaper patterns. Over half of the rooms received the highest rating when judged for these elements. This does not necessarily mean that the people living in homes were skillful in the use of the principle, rhythm, since again the architectural features which ranked high may not have been planned by the people living in these homes.

The principle of rhythm was used least successfully in the selection of textiles, furniture, and lamps. Thirty-seven to 46 per cent of the rooms received low ratings when these items were considered.

All three of these items would more than likely be selected by the people, themselves.

Harmony

Harmony is considered the most important of the art principles by various artists. It is by means of this principle that an impression of unity is produced in rooms by the selection and arrangement of furnishings. In the homes visited there seemed to be an attempt by the people responsible for the arrangement and selection of furnishings to create some feeling of unity. Fifty per cent of the living rooms rated for this principle ranked in the category of fairly good. No definite plan for unity was apparent for the entire room in many homes, since frequently some of the furnishings were in harmony, while other odd pieces showed no relationships to the rest of the furnishings.

When the rooms were rated for the application of harmony, according to the individual elements, the results showed that architectural features, furniture arrangement, and wall treatment rated high.

Little ability was shown in the selection of the items, furniture, textile designs, pictures, and accessories, from the standpoint of unity. Fifty-six per cent of the rooms rated for the item, textile designs, fell into the category of poor. This was the largest number of rooms to be rated poor when each element was rated according to any one art principle.

Emphasis

When rating the rooms for the principle, emphasis, value was given to the centers of interest created by the grouping of objects, to the use of the unusual, and to the use of decoration. The writer believes that one center of interest is essential, although centers of interest used skillfully may make a room more interesting and more attractive. Only one center of interest in a room was considered necessary in this study in order to receive the highest rank, 3, according to the rating scale.

When all the ratings of the elements in the rooms were averaged for each of the art principles, emphasis ranked the lowest, 1.8. Over half of the rooms were rated poor according to this principle. It seemed to the writer that the people living in the homes were unaware that their living rooms might be improved if a center of interest were arranged.

Color

In rating a room according to the art principle, color, it was the color scheme of the entire room that was evaluated. The writer believed that the results of this type of rating for color would be more valuable in this study than would be the judging of each of the elements separately, as was done for the art principles, proportion, rhythm, balance, and harmony.

It was evident from the ratings that in many

instances the people were unaware of or did not plan to apply the principles of design in the use of color. Between 44 and 54 per cent of all the living rooms rated for color according to the principles, proportion, balance, emphasis, rhythm, and harmony, received the lowest rating, poor. These findings agreed with the results of a study made by Russell (17) who found that homemaking students received lowest scores in the color part of the McAdory Art Test.

The exposure of the room should also be taken into consideration when selecting color. In this respect the homes visited rated somewhat better. In 58 per cent of the living rooms the colors used indicated that the people were aware of the principle that in rooms with little sunlight warm colors should predominate, and in rooms with a great deal of sunlight cool colors should predominate.

Utility

An object, in addition to being beautiful, should suit the purpose for which it is made. In this study there was a very close correlation between the ratings of the elements according to utility and the ratings according to the art principles. In other words, those persons who select and arrange objects according to the art principles also consider the principle of utility, or vice versa. This was verified by statistical analysis.

Occupations

Twenty-nine of the 50 living rooms rated were in homes of people employed in professional work or business. The other 21 were in homes of railroad workers and farmers. Thirteen of the living rooms in the professional homes rated in the top rank, good. In the 21 homes of the railroad workers and farmers, only one living room ranked in the category, good; the others were fairly good or poor. The writer is of the opinion that there should be more than 13 of the 29 homes in the professional group ranking good and certainly more in the other group. In both groups there is evident need for improvement of taste in the selection of furnishings for living rooms.

Recommendations

The evaluation of the application of art principles in this representative sample of the living rooms in Carbondale, Illinois, suggests the following recommendations for the homemaking course in the University High School at Carbondale, Illinois.

1. The homemaking course should include a thorough study of the art principles in relation to home furnishings.
2. The homemaking course should especially emphasize the application of the art principles, rhythm, harmony, emphasis, and color.

3. The course should provide activities that will enable the students to do the following things:

a. Study furniture and select various styles that can be combined successfully in a room.

b. Select accessories which are in good taste and harmonize with the room furnishings.

c. Gain an understanding of the principles of good decorative design and have the opportunity to select such textiles which will also harmonize with the rest of the room furnishings.

d. Understand good selection of wall treatments.

e. Select appropriate accessories, with the thought in mind that they can be both useful and in good taste.

f. Select and arrange pictures according to the art principles.

g. Make wise choices in the selection of floor coverings, with the idea in mind that they are a part of the background of the room.

h. Arrange furniture in units for the purpose of utility and attractiveness.

i. Arrange an attractive center of interest.

j. Understand color and select and arrange furnishings according to the principles of color.

k. Understand the importance of good architectural features with the thought in mind that they may at some time help to plan a house.

Chapter VI

SUMMARY

In order to answer the problem, How can the homemaking classes in Carbondale, Illinois, aid girls in making their living rooms more attractive?, a rating scale was devised to rate the elements present in the living rooms according to six art principles. This rating scale was used in the judging of 50 living rooms in the homes of the girls of University High School at Carbondale, Illinois.

The ratings according to the general impression of the entire room showed that 14 rooms rated good; 26 rooms, fairly good; and 10 rooms, poor. When the 50 living rooms were rated according to the use of the art principles, it was found that the principle of proportion was best used. The others ranked in the order, balance, rhythm, harmony, color, and emphasis.

The individual elements which rated high were architectural features, draperies, wall treatment, and floor coverings. The elements which rated low were furniture, accessories, pictures, and design of textiles. All other elements rated fairly good.

In this study the rank-order coefficient correlation (r) between the principle of utility and the

application of the art principles was found to be .89 with a probable error of (ρ) equal to .021.

Recommendations

In view of the findings it was recommended that the homemaking course at Carbondale, Illinois, be enriched with a thorough study of the art principles in relation to the home; that this study emphasize particularly the application of the art principles, rhythm, harmony, emphasis, and color; that this study include activities which will enable the girls to have practical experiences in applying art principles to the furnishings of living rooms.

A P P E N D I X

APPENDIX TABLE OF CONTENTS

<u>Appendix</u>		<u>Page</u>
A	A RATING SCALE FOR JUDGING LIVING ROOMS ACCORDING TO THE APPLICATION OF ART PRINCIPLES	51
B	A DESCRIPTIVE GUIDE FOR AN OBJECTIVE EVALUATION OF LIVING ROOMS ACCORDING TO THE ART PRINCIPLES	53
C	RATING SCALE FOR JUDGING LIVING ROOMS ACCORDING TO THE PRINCIPLE, UTILITY	64
D	A DESCRIPTIVE GUIDE FOR AN OBJECTIVE EVALUATION OF LIVING ROOMS ACCORDING TO THE ART PRINCIPLES	65
E	COMPARISON OF LIVING ROOMS IN UTILITY AND APPLICATION OF ART PRINCIPLES.	66
F	MASTER DATA SHEET	69

Appendix A.--A RATING SCALE FOR JUDGING LIVING ROOMS
ACCORDING TO THE APPLICATION OF ART PRINCIPLES.

Name _____ Address _____

Proportion

To what extent are
rooms and furnishings
in good proportion?

1. The architectural features 3 2 1
2. The furniture 3 2 1
3. The design of textiles 3 2 1
4. The draperies 3 2 1
5. The pictures and wall hangings 3 2 1
6. The lamps 3 2 1
7. The floor covering 3 2 1
8. The wallpaper pattern 3 2 1
9. The accessories 3 2 1

Total _____

General impression

Good ___ Fairly good ___ Poor ___

Rhythm

To what extent do
room and furnishings
express rhythm?

Consider the following:

1. The architectural features 3 2 1
2. The furniture 3 2 1
3. The furniture arrangement 3 2 1
4. The design of textiles 3 2 1
5. The lamps 3 2 1
6. The wallpaper pattern 3 2 1

Total _____

General impression

Good ___ Fairly good ___ Poor ___

Balance

To what extent do room
and furnishings express
balance?

1. The architectural features 3 2 1

Balance (continued)

2. The furniture arrangement 3 2 1
3. The pictures and wall hangings 3 2 1
4. The lamps 3 2 1
5. The floor covering 3 2 1
6. The accessories 3 2 1

Total _____

Good ___ Fairly good ___ Poor ___

Emphasis

To what extent does the
room attract attention?

1. By grouping objects 3 2 1
2. By use of decoration 3 2 1
3. By use of the unusual 3 2 1

Total _____

Good ___ Fairly good ___ Poor ___

Color

To what extent do room
and furnishings show
good use of color?

1. Are the colors used in good proportion? 3 2 1
2. Is there rhythm in the color arrangement? 3 2 1
3. Is there emphasis in the color arrangement? 3 2 1
4. Is there balance in the colors used? 3 2 1
5. Are the colors properly chosen? 3 2 1
6. Is the color scheme harmonious? 3 2 1

Total _____

Good ___ Fairly good ___ Poor ___

Appendix A.--A RATING SCALE FOR JUDGING LIVING ROOMS
 ACCORDING TO THE APPLICATION OF ART PRINCIPLES.--
 Continued

Harmony

To what extent do the
 room and furnishings
 express harmony?

Consider the following:

- | | | | |
|--------------------------------------|---|---|---|
| 1. The architectural
features | 3 | 2 | 1 |
| 2. The furniture | 3 | 2 | 1 |
| 3. The furniture
arrangement | 3 | 2 | 1 |
| 4. The design of
textiles | 3 | 2 | 1 |
| 5. The pictures and
wall hangings | 3 | 2 | 1 |
| 6. The wall treatment | 3 | 2 | 1 |
| 7. The accessories | 3 | 2 | 1 |

Total _____

General impression

Good ___ Fairly good ___ Poor ___

Appendix B.--A DESCRIPTIVE GUIDE FOR AN OBJECTIVE EVALUATION OF LIVING ROOMS ACCORDING TO THE ART PRINCIPLES.

<u>Elements</u>	<u>PROPORTION</u>		
	<u>Good</u> (3)	<u>Fairly Good</u> (2)	<u>Poor</u> (1)
Architectural features (doors, windows, shape of room).	Room is rectangular. Windows and doors are in scale with room.	Room is square. Some of the doors and windows are in scale with the room.	Room is square. Very few or none of the doors and windows are in scale with the room.
Furniture	Individual pieces of furniture are in scale with the room. Furniture arranged in groups which are in scale with the room.	Some of the individual pieces of furniture are in scale with the room. Some of the furniture arranged in groups which are in scale with the room.	Very few or none of the individual pieces of furniture are in scale with the room. Very little or none of the furniture arranged in groups is in scale with the room.
Design of textiles (furniture, rug, draperies).	Design is in scale with the place or object where it is used.	Some of the design used is in scale with the place or object where it is used.	Very little or none of the design is in scale with the place or object where it is used.
Draperies	Conform to a structural line in the room. Are the best width for window.	Extend to a structural line in the room. Are not the best width for the window.	Do not extend to a structural line in the room. Are not the best width for the window.
Pictures and wall hangings	Separate pictures and wall hangings are in scale to the wall on which they hang.	Some of the separate pictures and wall hangings are in scale to wall on which they hang.	Very few or none of the separate pictures and wall hangings are in scale to wall on which they hang.

Appendix B.--continued

PROPORTION.--Continued

Elements	Good (3)	Fairly Good (2)	Poor (1)
Pictures and wall hangings (cont.)	Groups of pictures are in scale to each other. Groups of pictures are in scale with the wall on which they are hung.	Some of the groups of pictures are in scale to each other. Some of the groups of pictures are in scale with the wall on which they are hung.	Very few or none of the groups of pictures are in scale to each other. Very few or none of the groups of pictures are in scale with the wall on which they are hung.
Lamps (table, floor).	Floor lamps are in scale with the room. Table lamps are in scale with the object on which they are placed. Shades are in scale with the base.	Some of the floor lamps are in scale with the room. Some of the table lamps are in scale with the objects on which they are placed. Some of the shades are in scale with the base.	Very few of the floor lamps are in scale with the room Very few of the table lamps are in scale with the objects on which they are placed. Very few of the shades are in scale with the base.
Floor covering.	Border of floor exposed is in scale with the rugs or rug scheme.	Rugs and exposed borders somewhat out of proportion.	Improper proportion between rug and exposed border.
Wallpaper pattern.	Pattern is in scale with the room.	Pattern is little too large or too small to be in scale with the room.	Pattern is much too large or too small to be in scale with the room.

Appendix B.--Continued

PROPORTION.--Continued

<u>Elements</u>	<u>Good</u> (3)	<u>Fairly Good</u> (2)	<u>Poor</u> (1)
Accessories	Separate accessories are in scale with the object on which they are placed.	Some of the separate accessories are in scale with the object on which they are placed.	Very few of the separate accessories are in scale with the object on which they are placed.
	Groups of accessories are in scale with the objects on which they are placed and in scale with each other.	Some of the groups of accessories are in scale with the objects on which they are placed and in scale with each other.	Very few of the groups of accessories are in scale with the objects.

Appendix B.--Continued

<u>Elements</u>	<u>Good</u> (3)	<u>RHYTHM</u>	
		<u>Fairly Good</u> (2)	<u>Poor</u> (1)
Architectural features.	Design of woodwork or type of woodwork is repeated on doors and windows. Shape of doors and windows is repeated.	The architectural features express some rhythm in the design of woodwork or type of woodwork. The architectural features express some rhythm in shapes of doors and windows.	The architectural features express no rhythm.
Furniture	Styles of furniture are repeated. Type of wood is repeated.	Some of the styles of furniture are repeated. Some of the type of wood is repeated.	Styles of furniture lack repetition. No repetition of type of wood.
Furniture arrangement	Large pieces of furniture are parallel to wall. Furniture is arranged in units.	Some of the large pieces of furniture are parallel to wall. Some of the furniture is arranged in units.	None of the large pieces of furniture are parallel to wall. None of the furniture is arranged in units.
Design of textiles	All the textiles used express rhythm. a. Design repeated. b. Color repeated.	Some of the textiles used express rhythm. a. Design repeated. b. Color repeated.	None of the textiles used express rhythm. a. Design repeated. b. Color repeated.

Appendix B.--Continued

RHYTHM.--Continued

<u>Elements</u>	<u>Good</u> (3)	<u>Fairly Good</u> (2)	<u>Poor</u> (1)
Lamps	Repetition of shape, design and color produces good rhythmic effect.	The lamps express some rhythm through repetition of shape, design, or color.	The lamps express no rhythm through repetition of shape, design, or color.
Wallpaper pattern	The pattern expresses rhythm. a. Repetition of good design. b. Repetition of harmonious color scheme.	The pattern expresses some rhythm. a. Repetition of design. b. Repetition of color.	No rhythm expressed. a. Repetition of design. b. Repetition of color.

Appendix B.--Continued

<u>Elements</u>	<u>Good</u> (3)	<u>BALANCE</u>	
		<u>Fairly good</u> (2)	<u>Poor</u> (1)
Architectural features.	The opposite walls are balanced. Each wall is balanced.	The opposite walls are fairly well balanced. Each wall is fairly well balanced.	The opposite walls are not balanced. Each wall is not balanced.
Furniture arrangement	The opposite walls are balanced. Each wall is balanced.	The opposite walls are fairly well balanced. Each wall is fairly well balanced.	The opposite walls are not balanced. Each wall is not balanced.
Pictures and wall hangings.	Balanced on the walls where they are hung. Balanced in relationship to furniture. Pictures in groups are balanced in relationship to each other.	Some of the pictures are balanced on the walls where they are hung. Some of the pictures are balanced in relationship to the furniture. Some of the pictures in groups are balanced in relationship to each other.	Very few or none of the pictures are balanced on the walls on which they are hung. Very few or none of the pictures are balanced in relationship to the furniture. Very few or none of the pictures in groups are balanced in relationship to each other.
Lamps	Balanced in relationship to each other. Balanced on the object on which they are placed.	Fairly well balanced in relationship to each other. Fairly well balanced on object where they are placed.	Very few or none are balanced in relationship to each other. Very few or none are balanced on object where they are placed.

Appendix B.--Continued

<u>Elements</u>	<u>BALANCE.</u> --Continued		
	<u>Good</u> (3)	<u>Fairly Good</u> (2)	<u>Poor</u> (1)
Floor covering.	Balanced in relationship to the floor. Parallel to the walls.	Fairly well balanced in relationship to the floor. Some of the rugs are parallel to the walls.	Not balanced in relationship to the floor. Not parallel to the walls.
Accessories	Balanced in relationship to the surface where they are placed. Balanced in relationship to group.	Some are balanced in relationship to surface where they are placed. Some are balanced in relationship to group.	Not balanced in relationship to the surface where they are placed. Not balanced in relationship to group.

Appendix B.--Continued

<u>Elements</u>	EMPHASIS		
	<u>Good</u> (3)	<u>Fairly Good</u> (2)	<u>Poor</u> (1)
Grouping of objects.	The lines of the furniture are placed to lead to the center of interest	Some attempt is made to arrange the lines of the furniture to lead to the center of interest.	No attempt is made to arrange the lines of the furniture to lead to the center of interest.
	The color of the objects is arranged to lead to the center of interest.	Some attempt is made to arrange the color of objects to lead to a center of interest.	No attempt is made to arrange the color of the objects to lead to the center of interest.
Decoration	A decorative object or material is used to lead to a center of interest. (Vase, wallpaper, couch-cover, textile.)	Some attempt is made to use an object or material to lead to a center of interest.	No attempt is made to use an object or material to lead to a center of interest.
Use of the unusual.	An unusual object is used to lead to a center of interest. (Fireplace, glass plants, antiques.)	No unusual object is used.	No unusual object is used.

Appendix B.--Continued

<u>Elements</u>	<u>Good</u> (3)	<u>COLOR</u> <u>Fairly Good</u> (2)	<u>Poor</u> (1)
Proportion	Used according to the laws of areas.	Used fairly well according to the law of areas.	Not used according to the law of areas.
Rhythm	Repeated skillfully in several places in the room.	Some colors are repeated skillfully in several parts of the room.	Colors are not repeated.
Emphasis	One color is predominant.	Equal color distribution.	Many colors used in small amounts.
Balance	Used according to the law of areas.	Used fairly well according to the law of areas.	Law of areas not used.
Exposure	Large areas of cool colors are used in rooms with sunlight. Large areas of warm color are used in rooms with little or no sunlight.	Cool colors are used fairly well in rooms with sunlight. Warm colors are used fairly well in rooms with little or no sunlight.	Cool colors are not used in rooms with sunlight. Warm colors are not used in rooms with little or no sunlight.
Harmony	A standard color scheme is used successfully. The colors used are combined successfully.	A standard color scheme is used fairly well. The colors used are combined fairly successfully.	No standard color scheme is used. The colors used are not combined successfully.

Appendix B.--Continued

<u>Elements</u>	<u>HARMONY</u>		
	<u>Good</u> (3)	<u>Fairly Good</u> (2)	<u>Poor</u> (1)
Architectural features.	All architectural features are in harmony. a. Shape b. Design c. Color	Some of the architectural features are in harmony. a. Shape b. Design c. Color	Very few or none of the architectural features are in harmony. a. Shape b. Design c. Color
Furniture	All the furniture is in harmony. a. Line and shape b. Color	Some of the furniture is in harmony. a. Line and shape b. Color	Very little or none of the furniture is in harmony. a. Line and shape b. Color
Design of textiles. (Furniture, rug, draperies.)	Designs of all textiles are in harmony. a. Color b. Idea	Designs of some textiles are in harmony. a. Color b. Idea	Designs of very few or none of the textiles are in harmony. a. Color b. Idea
Furniture arrangement	All units are in harmony. a. Line b. Color c. Size	Some of the units are in harmony. a. Line b. Color c. Size	Very few or none of the units are in harmony. a. Line b. Color c. Size

Appendix B.--Continued

<u>Elements</u>	<u>HARMONY.</u> --Continued		
	<u>Good</u> (3)	<u>Fairly Good</u> (2)	<u>Poor</u> (1)
Pictures and wall hangings.	All of the pictures and wall hangings are in harmony. a. Shape b. Size c. Idea d. Color	Some of the pictures and wall hangings are in harmony. a. Shape b. Size c. Idea d. Color	Very few or none of the pictures and wall hangings are in harmony. a. Shape b. Size c. Idea d. Color
Wall	The wall treatment is in harmony. a. Idea b. Color	The wall treatment is fairly good in harmony. a. Idea b. Color	The wall treatment is not in harmony. a. Idea b. Color
Accessories	All the accessories are in harmony. a. Line-shape b. Size c. Idea d. Color	Some of the accessories are in harmony. a. Line-shape b. Size c. Idea d. Color	Very few or none of the accessories are in harmony. a. Line-shape b. Size c. Idea d. Color

Appendix C.--RATING SCALE FOR JUDGING LIVING ROOMS
 ACCORDING TO THE PRINCIPLE, UTILITY.

To what extent do the room and furnishings suit their purpose?

1. The furniture	3 2 1
2. The design of textiles	3 2 1
3. The draperies	3 2 1
4. The lamps	3 2 1
5. The pictures and wall hangings	3 2 1
6. The floor covering	3 2 1
7. The wall treatment	3 2 1
8. The accessories	3 2 1

Good _____ Fairly Good _____ Poor _____

Appendix D.--A DESCRIPTIVE GUIDE FOR AN OBJECTIVE EVALUATION OF LIVING ROOMS ACCORDING TO THE ART PRINCIPLES

<u>Elements</u>	<u>UTILITY</u>		
	<u>Good</u>	<u>Fairly Good</u>	<u>Poor</u>
Furniture	All the furniture is suited to its purpose. a. Size b. Arrangement	Some of the furniture is suited to its purpose. a. Size b. Arrangement	Very little or none of the furniture is suited to its purpose. a. Size b. Arrangement
Textiles	Durable. Do not soil easily.	Fairly durable Do not soil very easily.	Not durable Soil easily.
Draperies	Material appropriate.	Material fairly appropriate.	Material not appropriate.
Lamps	Sufficient number for adequate lighting. Placed correctly for adequate lighting.	Number fairly sufficient for adequate lighting. Some of the lamps placed correctly for adequate lighting.	Not a sufficient number for adequate lighting. Lamps not placed correctly for adequate lighting.
Floor coverings	Material and color will not show foot marks.	Material and color show some foot marks.	Material and color show every foot print.
Wall treatment	Walls can be cleaned easily.	Walls can be cleaned fairly easily.	Walls are difficult to clean.
Accessories	All the accessories serve their purpose.	Some accessories serve their purpose.	Very few or none of the accessories serve their purpose.

Appendix E.--COMPARISON OF LIVING ROOMS IN UTILITY AND APPLICATION OF ART PRINCIPLES

Living Rooms	Rank of Art Principles	Rank of Utility	Difference in Ranks	Difference Squared
43	1.5	1.5	0	0
26	1.5	1.5	0	0
45	4.5	15.5	11	121.00
40	4.5	4.5	0	0
37	4.5	8.5	4	16.00
13	4.5	7.0	2.5	6.25
34	8.0	4.5	3.5	12.25
31	8.0	21.0	13.0	169.00
25	8.0	4.5	3.5	12.25
33	10.0	12.0	2.0	4.00
38	12.0	15.0	3.0	9.00
28	12.0	21.0	9.0	81.00
27	12.0	21.0	9.0	81.00
29	14.0	8.5	5.5	30.25
47	16.0	12.00	4.0	16.00
8	16.0	21.00	5.0	25.00
4	16.0	4.5	11.5	132.25
48	19.0	12.0	7.0	49.00
46	19.0	12.0	7.0	49.00
3	19.0	21.0	2.0	4.00
44	22.5	27.5	5.0	25.00
35	22.5	43.0	20.5	420.25
32	22.5	21.0	1.5	2.25

Appendix E.--Continued

Living Rooms	Rank of Art Principles	Rank of Utility	Difference in Ranks	Difference Squared
16	22.5	12	10.5	110.25
50	26.5	21.0	5.5	30.25
49	26.5	27.5	1.0	1.0
41	26.5	27.5	1.0	1.0
19	26.5	30.0	3.5	12.25
30	29.5	21.0	8.5	72.25
17	29.5	37.5	8.0	64.00
36	32.5	33.0	.5	.25
18	32.5	33.0	.5	.25
7	32.5	21.0	11.5	132.25
2	32.5	33.0	.5	.25
24	35.0	43.0	8.0	64.00
23	36.5	40.5	4.0	16.00
22	36.5	35.0	1.5	2.25
42	38.5	31.0	7.5	56.25
1	38.5	27.5	11.5	121.00
39	40.0	46.5	6.5	42.25
21	43.0	46.5	3.5	12.25
15	43.0	45.0	2.0	4.0
12	43.0	40.5	2.5	6.25
9	43.0	37.5	5.5	30.25
5	43.0	43.0	0.0	0.0
20	46.5	49.0	2.5	6.25

Appendix E.--Continued

Living Rooms	Rank of Art Principles	Rank of Utility	Difference in Ranks	Difference Squared
14	46.5	37.5	9.0	81.0
11	48.5	37.5	11.0	121.0
6	48.5	50.0	1.5	2.25
10	50.0	48.0	2.0	4.0
				<u>2,257.75</u>

$$r = 1 - \frac{6 \sum D^2}{n(n^2-1)} = .89$$

$$PE_r = \frac{.7063(1-r^2)}{\sqrt{n}} = .021$$

Appendix F.--MASTER DATA SHEET

B I B L I O G R A P H Y

BIBLIOGRAPHY

1. Cox, G. J. Educational value of art. Teachers college record, 34:29-33, October 1932.
2. Edmonston, Louise Meeds. The teaching of art through the use of home projects with reference to the Haynesville high school. Master's thesis, 1936. Louisiana State University. (Abstract in: Louisiana state university. Abstracts of theses 1935-36. University bulletin, N.S., 28:115.)
3. Goldstein, Harriet, and Goldstein, Vetta. Art in everyday life, 3rd ed. New York, Macmillan co., 1940. 497 p.
4. Goldstein, H. Art: its place in the home. Journal of home economics, 36:549-52, November 1931.
5. Hamilton, H. M. A course of study in related art for vocational homemaking schools in Illinois. Special report, 1941. Colorado State College. 69 p.
6. Hathaway, P. A study of the housing conditions and living rooms of 200 families in Iberville Parish, Louisiana. Master's thesis, 1941. Louisiana State University. (Abstract in: Louisiana state university. Abstracts of theses, 1940-41. University bulletin, N.S., 34:160-61.)
7. Hess, Sister M. Lucienne. Measurement of student's growth in art appreciation developed through certain experiences in solving selected problems in home economics. Master's thesis, 1942. Louisiana State University. (Abstract in: Louisiana state university. Abstracts of theses, 1941-42. University bulletin, N.S., 35:92-93.)
8. Hodgson, H. B. A study of the homes of eighth grade pupils of Dayton, Ohio, with implications for the home economics curriculum. Master's thesis 1941. Ohio State University. (Abstract in: Ohio state university. Abstracts of theses... master's degree. Summer quarter, 1941. Abstracts of master's theses, no. 37:122-3.)

- 9. Lowe, L. Housing conditions in Hancock county, Georgia. Master's thesis, 1941. University of Georgia. (Abstract in: Association of land grant colleges and universities. Home economics section. Notes on graduate studies and research in home economics and home economics education, 1941-42. p. 192.)
- 10. Martens, Rachel. The furnishing of 290 rural Kansas homes. Master's thesis, 1940. Kansas State College. (Abstract in: Association of land grant colleges and universities. Home economics section. Notes on graduate studies and research in home economics and home economics education, 1940-41, p. 154.)
- 11. Meshke, E. Our related art program. Journal of home economics, 37:335-6, June 1945.
- 12. Neal, Eula May. The home furnishings of a selected group of rural homemakers in Kansas. Master's thesis, 1940. Kansas State College. (Abstract in: Association of land grant colleges and universities. Home economics section. Notes on graduate studies and research in home economics and home economics education, 1940-41. p. 154.)
- 13. Paterson, M. F. Art appreciation in the life of the homemaker. Journal of home economics, 29:231-2 April 1937.
- 14. Pettes, M. Unit in furnishing and care of the home. Journal of home economics, 23:1014-15, November 1931.
- 15. President's conference on home building and home ownership. Washington, D. C., 1931. Homemaking, home furnishing, and information services. Washington, D. C., The President's conference on building and home ownership, 1932. p. 238.
- 16. Rhyne, M. M. Growth made by a group of girls in appreciation of beauty in surroundings and human relationships. Master's thesis, 1941. University of North Carolina. (Abstract in: Association of land grant colleges and universities Home economics section. Notes on graduate studies and research in home economics and home economics education, 1941-42.)

17. Russell, Mabel. Judgement ability in art of students entering home economics at Iowa State College, 1931. Master's thesis, 1933. Iowa State College. (Abstract in: U. S. Office of education. Abstract of theses in home economics education, 1931-34, Wash. U. S. Govt. print. off., 1933. p. 71.)
18. Sherrill, Rovena Hammon. The family living areas of thirty rural families in Kansas. Master's thesis, in progress. Kansas State College. (Abstract in: Association of land grant colleges and universities. Home economics section. Notes on graduate studies and research in home economics and home economics education, 1940-41. p. 155.)
19. Tyler, Katherine. High school art can aid homes of today and tomorrow. School arts, 43:233, March 1944.