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UNIVERSITY OF LOUISVILLE

ART IN DRESS-A UNIT OF WORK

A Dissertation

Submitted to the Faculty

Of the Graduate School of the University of Louisville

In Partial Fulfillment of the

Requirements for the Degree

Of Master of Arts

Department of Education

By

Berta Warner

1943

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TITLE OF THESIS: Art in Dress-A Unit of Work

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DATE: May 27 1943

TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
I. Introduction.....	1 ✓
A. Purpose	
B. Incentive for Writing	
C. Evaluation of the Unit	
D. Objectives	
II. Some Concepts of Art Education.....	7
A. Old Ideas	
B. Modern Concepts	
III. A Suggested Outline for Teaching the Unit	
<u>Art in Dress</u>	16 ✓
A. Overview.....	16 ✓
B. The Problem.....	16 ✓
C. Objectives.....	17 ✓
D. Placement and Time.....	18 ✓
E. Major Question.....	18 ✓
F. Methods of Approach.....	19 ✓
G. Content and Procedure.....	21
H. Pupil Activities.....	30 ✓
I. Evaluation.....	33 ✓
J. Vocabulary.....	36
K. References for the Students.....	40
L. References for the Teacher.....	42
IV. Teaching the Unit- <u>Art in Dress</u>	46
A. Overview.....	46
B. Approach.....	47 ✓
C. Diagnostic Tests.....	51 ✓
D. The Problem.....	53 ✓
E. Organization for Work.....	53 ✓
F. A Study of Color.....	54
1. Source	
2. Qualities	
3. Behavior	
4. Description and Classification	
5. Names	
6. Personal Coloring	
7. Harmonies and Contrasts	
8. Color Types	
G. Textiles.....	82
1. Types of Fibers	
2. Weaves	

H. Line.....	89
I. Form.....	92
1. Period Costume	
J. Pupil Activities in Superior and Average Groups.....	97
K. Planning a Wardrobe.....	105
L. Culminating Activities.....	110
1. Of the Plan	
2. Of the Program	
M. Evaluation.....	112
1. Tests	
V. Evaluation of the unit from the Stand- point of the Teacher.....	118
A. Achievements	
B. Other Possibilities	
C. Bibliography.....	125

I

A UNIT OF WORK-ART IN DRESS

CHAPTER I

A UNIT OF WORK-ART IN DRESS

INTRODUCTION

Introduction and Purpose. It is the purpose of this study to consider and construct a unit of work--Art in Dress. Since the same principles and elements obtain in creating a correct and pleasing costume as those involved in composing a picture or designing a building, a large part of the content of the following pages is devoted to the elements and principles of design.

A second aim of the unit is to show the importance of creative and appreciative art experiences in relation to dress design, and of the relationship existing between these and other interests and experiences of the student.

The plan of the unit includes a brief discussion of the underlying educational philosophy; changes in the conceptions of art education; and the construction of the unit. The latter consists of elements in design, and of art principles employed in the creation of

costumes that are beautiful and satisfying.

The first incentive for the writing of this unit came through personal and rather unique channels. A young girl, a former student in one of the writer's art classes, appeared in a costume so clearly incompatible with her type as to cause distinct shock. The thought, "It is certain that I have done nothing for you", flashed through the writer's mind, and may have been responsible for arousing an interest among the students of current classes in the subject Art in Dress. At any rate, requests began coming in for such a course, and after conferring with a large number of girls, individually and in small groups, a very real need was felt. Through the findings of the questionnaire which follows, it became increasingly evident that many students were interested in learning how to make a good personal appearance, and thus the unit was begun.

TABLE ONE

Questionnaire Given to 165 Pupils
Concerning Preferences in Art Activities

Art Choices	No. of Pupils First Choice	No. of Pupils Second Choice	No. of Pupils Third Choice
Improving ones personal appearance (Art in relation to dress)	80	38	12
Improving ones room or home (Art in relation to the home)	35	22	86
Painting; modelling, and carving (Art in expressing creative ideas)	32	60	56
Lettering, making note books, mounting pictures, etc.	18	45	11
Total.....	165	165	165

The writer concluded the fact to be significant that of the 165 pupils to whom the questionnaire was submitted, nearly fifty per cent (eighty pupils) made Art in Dress their first choice for study.

Many of those interested cared not at all for the sewing and fitting phase of the subject, because it was their custom to purchase their clothing ready made; but they were eager to develop a sense of fitness and proportion with

an individuality and distinction which they termed style.

The unit, Art in Dress, was selected because of its peculiar adaptability to the group it was designed to serve--a class in the Louisville Girls' High School. It was chosen, too, because of the social demand for it at this particular time. We are no longer living in an age when all must conform to standard patterns, but rather in a time when each must strive to develop individuality and to become a distinctive factor in society. The individual must possess that charm of personality which will make her an asset to the home, to friends, to the school, and to the community in which she lives. Such social demands challenge her, and preclude a goal to be striven for. A third reason for the choice of this unit for study is that it has seemed to the writer the best means of inculcating in the average student better taste in the selection of her personal wardrobe, and of affording the talented student intelligent and sympathetic guidance.

The building which houses the Louisville Girls' High School, and the Louisville Junior

High School is called Reuben Post Halleck Hall. It is situated at 121 West Lee Street, Louisville, Kentucky. The enrollment in the senior division varies from twelve to fifteen hundred.

The school is equipped with a well chosen library which may be supplemented with books and periodicals from the nearby University of Louisville Library, and the Louisville Public Library.

Twenty-eight girls ranging in age from fifteen to seventeen enrolled in the class carrying on this unit of work, which began October 1, 1942 and extended over a ten-weeks' period. Since art is elective in the Louisville Girls' High School, the pupils in one class may come from various grades. In this class eight were fourth year pupils, fourteen, third year, and six, second year pupils. Consequently some had had considerable experience with art materials, and had been exposed to good art forms, while others had had little experience in seeing or handling art materials. All were of average or above average mental ability and came from homes representing moderate educational backgrounds and social attitudes. Financially they belonged to a substantial middle

class. About three-fourths of them lived in homes owned by their parents. Of the eight girls finishing high school that year, three planned to enter college, four were going to work in stores or offices, and one was undecided.

In this school there is much freedom for the teacher and ample opportunity for innovations. The Louisville Course of Study in Art is merely suggestive, and in no way restricts the teacher. It admits therefore of opportunity to develop new ideas in the art department. The teacher is free to adapt the subject to any group of children, and to bring the work into harmony with their needs, interests, and abilities.

The writer hopes and believes that such a study as the unit provides will function in the life of the student, and will manifest its value in a definite and practical improvement in personal appearance through more intelligent and tasteful selection of clothing and accessories.

II

SOME CONCEPTS OF ART EDUCATION

CHAPTER II

SOME CONCEPTS OF ART EDUCATION AND THE NATURE OF THE UNIT

The "unit" as a method of learning is a modern process. According to early educational ideals subject matter existed for its own sake, and was believed to have had a disciplinary value, e. g., training in one subject was believed to impart to the mind a greater power in the mastery of another. Subject matter in art, in the modern conception, is important only as a means to an end--an instrument for conveying organized seeing, organized hearing, and organized behavior or feeling.

Early educators looked upon youth as a period of preparation for life; the modern educator regards it as life itself--a learning to live by living.

Art education in the early American high school emphasized skill, technique, and the realistic appearance of the product. In order to achieve these goals, children were encouraged to copy rather than to create; to strive for a perfect pattern, rather than to express them-

selves through the medium of art. Individuality was even frowned upon. All courses, in art as well as in other subjects, were designed to fit the student for college or for the schools of the professions.

With the change in institutions and the advent of psychological studies of the child and of the learning processes, came radical changes in the details of education and its objectives. Mursell¹ gives a concise statement of the functional view of teaching art when he says, "A child can learn more of real inwardness of color as one of the more broadly usable experiences of life by planning a costume, a room, a toy, or a stage setting, than by a great deal of formalized instruction."

The trend today, in the more progressive schools of the United States, is to make art more functional. Modern education is being based more on the attitudes of the youth, his environment, his problems, and his capacity for learning. More children are attending high school, and as a consequence, the schools have been forced to adapt their curricula to

1. James L. Mursell, Some Generalizations Concerning Art Education, Art Education Today: New York Teachers College, Columbia University, An Annual, Bureau of Publications, p.69 1937.

widely varied groups. It has become necessary for them to establish closer contact with the home and the community, and to adapt themselves to the changed conditions of the modern world.

Those who subscribe to the experience unit plan have a broad concept of the curriculum. Under this concept, the curriculum involves all elements of experience--that is, everything the pupil does from the time he enters school until he leaves. To be of value, all experiences must be related and so arranged that the result will show a gradual growth from one experience to another. Harap² interprets the unit as a coherent learning experience having a purpose which is meaningful to the pupil, which is accepted as his own, and which is closely related to a life situation. If the curriculum is made up of balanced, meaningful situations, all of the necessary fundamental processes will operate because the most successful ones will occur in the successive learning units.

A Commission on the Function of Art in General Education,³ appointed by the Progressive Education Association, in a recent report, sums

2. Henry Harap, An Experience Curriculum, National Council of English Teachers, Washington, D. C. pp. 105-109.
3. Commission on the Function of Art in Education for the Secondary School Curriculum, The Visual Arts in Education, D. Appleton Century Company, New York, 1941, pp. 15-18.

up the new conceptions of art as follows:

1. The most important object of art training is growth in personality.
2. Art experience is the right of every person.
3. Art should be a part of every day living.

By "growth in personality" the Commission means the cultivation of persons sensitive to all aspects of living--persons who understand not only how art functions in life, but who are aware of art values and will endeavor to transform the unsightly in their environment into something beautiful.

"Equal opportunity" is the key note of democracy. That "art should be inherent in all life" is interpreted to mean that art should manifest itself in the acts of expression of simple daily living--including such activities as selecting with discrimination the furnishings of a home, personal attire, industrial equipment et cetera.

It is encouraging to note that the philosophy underlying the unit Art in Dress coincides with that of such leaders in the field of public school art as D'Amico⁴ and Tannahill. D'Amico,

4. Victor E. D'Amico, Art and Individual Development on The Secondary Level. Fortieth Year Book of the National Society for the Study of Education, Public School Publishing Company, Bloomington, Illinois, 1941, pp. 541-544.

head of the Fine Arts Department of the Fieldston School, New York City, says "Training for the general student in the Fieldston school is mainly cultural." The aims of the Art Department are similar to those of other schools based on the tenets of progressive education. Four of the objectives he lists are given below:

- (a) To develop the individual capacities of each pupil to their fullest extent.
- (b) To acquire an awareness and mastery of the esthetic laws that govern all arts as they apply to all life.
- (c) To help the student derive more from his daily experience and contribute more to it.
- (d) To discover or augment the professional possibilities of the individual.

Tannahill⁵ expresses a similar view when she says, in substance, young people of high school age want to know about the art of their own time, such as modern industrial design and how it affects machine production, stream-lining, sky scrapers, new and contemporary types of advertising.

Human interest is keen at this age and should be stimulated. All phases of the arts of the theatre attract the modern youth. They

5. Sallie B. Tannahill, Art in Secondary Education Fortieth Year Book of the National Society for the Study of Education, Public School Publishing Company, Bloomington, Illinois, 1941 pp. 517-526.

are vitally interested in themselves, and subsequently, in costume design, in clothing, in becoming styles, in the silhouette, and in color that best suits the individual. Art in junior and senior high schools should not only relate to the present school life, but should reach out beyond the school to wider life experience.

Many of the more progressive schools of the United States have offered similar study units to that presented by the writer. Listed below are some of the secondary schools providing art courses which include such units:

The Los Angeles City and County Schools....1932
 The Schools of Missouri (State Art Course)..1941
 The Saginaw, Michigan schools.....1939
 The Schools of Delaware (State Art Course).1936
 The Baltimore, Maryland Schools.....1932
 The Lakewood, Ohio-and Cleveland Heights,
 Ohio Schools.....1938

The pupil experience type of unit is subscribed to by such authorities as Caswell, and Campbell, Hopkins, and Risk. The following criteria as set up by Harap⁶ are a fair expression of those endorsed by the contemporaries named:

1. Has the problem arisen because of particular interests, questions, needs, or experiences, of the children in the group?
2. Is the study appropriate for the maturity level of the group being considered?

6. Henry Harap, An Experience Curriculum, National Council of English Teachers, Washington, D. C. pp. 109-110.

3. Does the problem provide possibilities for challenging the child's thoughts to the extent that the experiences become a necessary integral part of the child's daily living?
4. Is it possible to provide materials and trips which are necessary for this study?
5. If the unit fulfills these criteria it will be a satisfying influence as well as an influence toward wholesome personal integration which is the greatest purpose of education.

In evaluating the Unit Art in Dress the above criteria have been used. This unit has been so constructed that the pupil has a part in choosing and planning what she will do. It provides opportunity for discovering significant relationships between art and life, and for acquiring the necessary experience with materials to develop needed skill. It furnishes opportunity for each pupil to progress at her own rate of speed. The organization is analogous to that of an orchestra, with members playing different instruments, each of which is adapted to the taste and the ability of the performer, and all working together to produce an harmonious whole.

It is organized around a vital center of interest--the pupil, her family, and her community. It then becomes the teacher's responsibility to provide learning situations to promote growth; to

aid in bringing about self-realization; to help the student to a satisfying way of life, to teach her to work in harmony with others, and to furnish opportunity for the acquisition of information and skill.

Because the unit, Art in Dress, provides opportunity for the pupil to plan, purpose, execute, and evaluate what she does, it has been organized on the experience unit plan. The writer believes that it is challenging enough to provoke thought, that it provides for a type of experience which will function in life, and that it furnishes learning situations in normal sequence.

The materials used are abundant, and, for the most part, personal possessions of the child, her family, or her friends. They are selected and classified by the pupil, under the teacher's guidance.

Results of the teaching of the unit, Art in Dress, have, in many respects, exceeded the writer's expectations. Pupils have learned something of basic styles, have interpreted trends in fashions, and have selected and classified materials with good taste and judgment. They have acquired skill in handling and cataloging materials, have arranged exhibits, created designs, prepared note

books, carried on investigations, classified themselves and their friends according to personality and color types, and selected wardrobes for themselves and others according to accepted art principles and standards.

III

A SUGGESTED OUTLINE FOR TEACHING THE UNIT

CHAPTER III

A SUGGESTED OUTLINE FOR TEACHING

THE UNIT

A. Overview. The unit Art in Dress has been planned to give to the student a better knowledge and understanding of the elements and principles of dress design, and an appreciation of the esthetic in costume. Elements of design include a study of color, line, form, and texture. The principles involve a wise use of these elements, and include a study of proportion, balance, rhythm, emphasis, and harmony.

Principles and elements may be taught by means of experimentation, discussion, analysis, demonstration, and investigation.

Through a study of the unit, the student should be made conscious of the necessity for appropriate and becoming apparel, and should be led to the development of abilities and skills in achieving for herself the desired goal.

B. The Problem. The problem confronting the group is how to develop discrimination and judgment in the selection of a personal wardrobe. The problem should evolve from the learning situation provided by the teacher, but should be the

expression of a very real need on the part of the pupils themselves. As a rule, it should be proposed by one or more members of the class.

The methods used in solving the problem will be controlled by the needs of the pupils and their past experiences in art; primarily, it will depend upon their knowledge of the principles of art structure, materials, and techniques. The types of methods may be analysis, experimentation, discussion, and investigation.

C. Objectives. The objectives of the teacher will be to impart a knowledge, understanding, and appreciation of the principles and elements of design as applied to dress; to equip the student with reliable standards for judging a costume; to develop certain abilities, habits, and skills in connection with the study; and to induce in the student desirable attitudes, such as, cooperation, observation, respect for the opinion of others in their selection of color in clothes, etc.

The pupil's objectives may include the satisfying of a desire to be stylish and to dress well;

the satisfying of the urge of self-expression; the gratification of a desire to be creative, e. g., to become a dress designer.

D. Placement and Time. The second year of high school seems to be the most appropriate time for the working out of the unit, Art in Dress. Pupils of this age and grade have pride in their appearance, and are capable of developing judgment and good taste in selecting their personal apparel.

In the opinion of the writer, a period of approximately ten weeks should be sufficient to teach such a group the elements and principles involved in the solution of the problem.

E. The Major Question. The major question should follow the introduction of the problem through informal discussion, or through immediate experience with art materials or art products. The discussion should stimulate thought and stress art knowledge and art qualities which will aid in the solution of the problem. The major question for the unit, Art in Dress, may be, "How may I learn to choose for myself the type of wardrobe best adapted to my personal appearance and to the expression of my individuality?"

F. Methods of Approach. A few of the many effective methods of approach to the problem are listed here for the convenience of the teacher.

1. Personal problems which may arise relative to dress for a particular social function may be discussed.
2. Unusual costumes seen on the street or screen, or at a play may be described and analyzed.
3. Styles from the latest fashion magazines may be examined and discussed.
4. Costumes seen at a fashion show may be analyzed.

The following imaginary demonstration may serve to illustrate the introduction of the unit to a class of girls interested in selecting costumes for a Fall Festival Dance--an annual social function of paramount interest to every girl in the senior division of the Louisville Girls' High School.

The teacher opens the discussion with the question, "What are you planning to wear to the Fall Festival this year?"

Some are considering informal party dresses;

some think that formal dresses are more becoming. Many are planning to buy new costumes and are eager for guidance in their selection.

The teacher suggests, "What kind of costume will be most appropriate?" Discussion brings out the thought that propriety depends upon the time, the place, and the individual.

Since the dance is to be held in the school gymnasium, the girls agree that informal party dresses will be most fitting.

Then the questions arise: "How may I know that I am selecting for myself the most becoming color, and the style best adapted to my personal type?"

"What is the fundamental difference between a formal and an informal dress?"

Discussion, guided by the teacher, reveals that the formal dress is usually floor length, décollete, and sleeveless. The informal has short sleeves, high or medium low neck, and a skirt which varies in length with the mode of the times and the preference of the wearer, but which is usually shorter than the formal type.

Relative to selection, some choose a costume for color, some for material, others for style

or for a combination of two or more of these qualities. Some select a dress because they "like it" without knowing why. Discussion brings out the fact that such criteria are highly unreliable, and that a more intelligent guidance is necessary to a satisfying choice. It is then decided that a dress, as well as other items of apparel, should be chosen with care. It should emphasize the wearer's best qualities, and minimize those less favorable. The girls now begin to see that dress is an individual matter, and that it is a personal problem for each of them. The esthetic in dress now begins to take on a new significance. What are some of the esthetic requirements in costume design?

The following general outline of content and procedure may serve as a guide in giving the student the fundamental knowledge necessary in answering this and similar questions.

G. Content and Procedure. The first step in the solution of the problem is the orderly arrangement of the various art elements----line, color, value, and texture.

1. Elements of design

- a. Line. Line, as one of the important elements of design, falls into the following general classes: vertical, horizontal, diagonal, and curved. Line has the power to alter form and proportion of face and figure, and to accent, reinforce, emphasize or ignore.

Read: Collins, Rose M., and Riley, Olive

Art Appreciation--Line in Dress pp. 51, 56, 57.

- b. Form. Certain basic forms exist in all art. Chief of these are the square, the circle, the rectangle, the oval, and the triangle. Works of art, whether paintings, sculpture, architecture, or dress design, employ these forms to secure desired effect. The most frequently recurring skirt forms in dress have been the circle and the rectangle (tubular).

Read: Young, Agnes, Recurring Cycles of Fashion
Chap. II-III.

- c. Color and Value. The important

qualities of color are hue, value, and intensity. Since value is a quality of neutrals (grays) also, it should be studied first. Value refers to the amount of light or dark in a gray or a color. Intensity is the brightness or dullness of a color. Hue is the quality which differentiates one color from another as red, green, blue, etc.

One way of giving the pupil experience in the matter of color qualities is to show a number of samples of cloth or paper in several values, intensities, and hues. The class may identify each quality while one pupil records the responses on the black board; as follows:

<u>Value</u>	<u>Intensity</u>	<u>Hue</u>
light	dull	yellow-orange
medium	grayed	red
dark	intense	green
high-dark	gray	violet

Before proceeding further in the study of color, it seems important to mention briefly two of the color systems in common use. The Prang system has been used in

this study because it is the one to which reference is made most frequently by available authorities on dress design. The Prang System has twelve colors--three primaries--red, yellow, blue; three secondaries--orange, green, and violet; and six intermediates--red-orange, yellow-orange, yellow-green, blue-green, red-violet, and blue-violet.

The Munsell¹ system is more exact from the standpoint of science, and eliminates much of the guess work in color, but it is more difficult for the average student to use. It is advisable, therefore, for the teacher to be familiar with both systems.

Color combinations are successfully arranged by harmony and by balance. The most commonly used color schemes obtained by harmony are analogous and monochromatic. Some of the color schemes arranged

1. T. M. Cleland, A Practical Description of the Munsell Color System, The Munsell Publishing Company, Philadelphia, 1929.

by the use of balance are complementary, split complementary, and triadic.

Read: Martini, Herbert E., Color, When and How
To Use It.

Harmonies of color in connection with the individual should be arranged after a personal color and value study has been made. To make the above study it is suggested that each girl, with the aid of her classmates, analyze herself as to value contrast and coloring. After this is done, swatches of dress material in various colors should be tried next to the face to see what each color does to the complexion, the hair, and the eyes. Following this activity, a personal coloring chart may be made by each girl. The following example may serve as a guide:

Personal Coloring Chart

Name of Pupil

Color of Hair	Color of Eyes	Complexion	Becoming Colors
Brown	Gray	Skin-fair Cheeks and lips-violet red	Grayed-green Blue-green Blue, blue- violet Black and White

Read: Weigand, Freida, Good Taste in Dress

Becoming Color Chap.XVI or Todd, Elizabeth,

Clothes for Girls-Becoming Colors-pp. 250-266.

- d. Texture. Some of the fabrics used in making clothes are cotton, wool, rayon (man made fibers), linen, and silk. A few of the dress materials made from cotton are organdie, gingham, lawn, seersucker, batiste, chambray, and voile; from wool, there are flannel, serge, broadcloth and jersey; from rayon, there are many different types of material. Some of these resemble silk, such as satin, crepe, and jersey; some resemble cotton, as viole, lawn, and seersucker; some resemble wool, as sheers, tweed, and

serge.

All fabrics have characteristic lines. They fall in groups according to the lines of their weave and texture. Firm material, such as Poiret twill, broadcloth, dress linen, and pique have straight lines suitable for formal tailored styles. Medium-firm materials give a less pronounced line. This group includes rough textures, such as tweeds, home spun, and shantung, and smooth textures, such as silk crepe, medium weight cotton, and flannel. They are suitable for informal or tailored sport styles. Soft textures are those weaves whose lines fall into soft folds. Panne velvet, soft satin, and georgette are included in this group. The lines created by crisp or stiff materials are angular and are used for puffed sleeves, flared cuts, or extreme styles for afternoon or evening.

Read: Weigand, Freida, Good Taste in Dress
Fabrics, Chap. XIV-XV. Gallemore, Margaret

Costume Design, Textures and Colors pp. 93-98.

2. Principles of Design. The elements just described, together with the principles of design provide reliable standards for judgment.

a. Proportion. Proportion is the interesting and pleasing relation of space division among the various parts of the costume. It creates the effect of balance, and seems to adjust the parts to each other, to the individual, and to the ensemble.

Read: Goldstein, Harriet, and Goldstein, Vetta, Art in Everyday Life, Proportion-Chap. IV.

b. Balance. Balance in a costume produces the effect of rest. Some of the ways of achieving balance are (1) by having two sides exactly alike (formal balance); (2) by having two sides unlike, but of equal interest (informal balance). The two types of balance may be obtained by the correct use of line; color, value, and shapes.

Read: Ryan, Mildred Graves, Your Clothes and Personality-Balance, pp. 64-65.

- c. Rhythm. Rhythm in a costume produces an effect of graceful movement as the eye travels easily from one part to another. It may be achieved by repetition, as of color in different parts of the design; by line, as a succession of pleats in orderly arrangement; by gradation of hue, value or intensity of color, as a gradual transition between bright and dull, or between light and dark.

Read: Goldstein, Harriet and Vetta, Art in Everyday Life, Rhythm-Chap. V.

- d. Emphasis. Emphasis may be achieved by contrast of hue, by use of value, or by line direction; for example, a brilliant clip or an attractive necklace draws the attention to the face, which is properly the center of interest. A small spot of light value, such as a white collar on a dark dress, will achieve the same result.

Read: Goldstein, Harriet and Vetta, Art in Everyday Life, Emphasis, Chap. VII.

- e. Harmony. Harmony is the principle of design which produces a sense of peace and order. This principle consists of the purposeful achievement of unity by choices that have likeness and consistency; for example, if curved lines appear in one part of a costume, for harmony they should appear elsewhere.

Read: Gallemore, Margaret, Costume Design
Harmony pp. 26-27.

H. Pupil Activities. All of the previous observations, discussions, experiments and reports should be followed with numerous activities. A few are suggested here:

1. Specific

- a. Find pictures of dresses some of which show formal balance and others showing informal balance.
- b. Find illustrations of the two types of balance in hats, in advertisements, in hair arrangement, in furniture groups, or in food service.

- c. Tie ribbon bows to show both types of balance.
- d. Find several examples of dresses which have harmonious lines. Find hats which would be in harmony with each dress.
- e. Find an example of a period costume in which the line of the costume is not in harmony with the line of the figure.
- f. If but one hat a year could be purchased, suggest that each pupil write a brief paragraph telling of the choice she would make and justifying it.
- g. Sketch details from three dresses (from shop windows) in which the interest has been directed to the wearer's face. Make notes telling what methods of design were used in each case.
- h. Find an example of a freakish style which the student believes to be unsuited to most individuals.
- i. Find one example of each of the

following color combinations as used in costume; neutral, accentuated neutral, monochromatic, analogous, complementary, split complementary, and triadic.

- j. Each pupil should make an individual chart which will employ the use of most of the principles of design just studied. The headings for such a chart appear below

MY INDIVIDUAL CHART

My best Lines	My best Silhou- ette	My best shapes within the Silhou- ette	My best Colors	My best Textures
------------------	----------------------------	---	-------------------	---------------------

The talented pupil may do less of the selecting and mounting of the examples, and more of the creating by drawing and painting.

2. General.

- a. Recall and discuss color knowledge-- use of neutrals and intensities, color harmonies, color terminology, and emotional effects.
- b. Analyze other students to discover

type to which each person belongs.

- c. Experiment with dress fabrics.
- d. Discuss various combinations as to tone and intensity of color.
Collect and mount samples.
- e. Demonstrate with charts and fabrics the effect of color on figure, on complexion, and on hair and eyes.
- f. Discuss significance of color in relation to personality.
- g. Experiment with colored fabrics to discover the color harmonies most becoming to the individual.
- h. Experiment with accessories for accents in color.
- i. Demonstrate with charts and with costumes worn by the pupils the use of the principles of design. (proportion, rhythm, balance, emphasis and harmony).
- j. Creative work to express ideas for talented pupils as, drawing and painting lay figures; drawing and painting dress designs.

I. Evaluation.

Finally, the teacher

will need definite plans for evaluating the unit, and it is hoped that the following suggestions will assist her in the task. Some of those for use in measurement are:

1. Has the pupil gained from the study a new attitude toward, and appreciations of, color as seen in nature and in the common things of every day life, as well as in costume?
2. Has she developed an increased ability to isolate and solve art problems?
3. Has she acquired a sensitivity to art forms and color patterns?
4. Has the student achieved a reasonable degree of excellence in selecting or designing of costume?
5. Has she gained ability to recognize the nature of materials, and some knowledge of the processes of their manufacture?
6. Has she learned the basic terms of an art vocabulary?
7. Has she acquired adequate knowledge of how to apply the basic principles of design by the use of line, form, color, texture, etc.

8. Has she learned the importance of neatness?
9. Has she acquired skill in selecting and handling materials?
10. Has she gained ability to select or create with moderate expenditure, a costume that will meet the standards of good taste?

Tests may be made by both the teacher and the student to determine results as outlined above. The teacher may tell the class that at some indefinite time the pupils will be asked to check their own costumes, on a particular day, by a chart or by a set of questions prepared by the teacher, to determine whether they meet the art standards as studied and accepted.

The teacher may observe and make favorable comment on improvements noted.

Pupils may be given opportunity to report on their individual observation of the costumes of mothers, sisters, or friends, and of improvements which might have been made in them. They may also report on results of their own applied tests.

Objective tests may be devised by the teacher. Some of these may be: the true-false type, multiple choice type, the completion type, the matching type, and the picture type.

By use of these tests the teacher may determine the growth in individual understanding of color qualities and art principles; in the development of ability to select a suitable wardrobe with appropriate accessories; in the ability to express personal ideas in different mediums; in the acquisition of an adequate art vocabulary; and in the recognition and choice of materials and textures for costumes.

J. Vocabulary. A definition of some of the terms used in this study seems to be an essential adjunct to the teaching of the unit, and is herein provided for convenience of both teacher and student:

Accessories-Harmonizing or contrasting adjuncts to a costume.

Argentine cloth-glazed tarleton

Bamberg-Rayon sheer (crepe)

Bengaline-Rib weave cloth of silk, wool, or rayon or combination

Bodice-waist

Bolero-Short jacket usually ending at normal waistline

Broadcloth-Cotton goods or wool lustrous nap lies in one direction

Brocade-Name applied to many fabrics which resemble historic silk brocades

Cambric-White cotton fabric-also linen fabric

Canton crepe-Originally silk-now mostly rayon

Cashmere-Light weight twill wool goods copied in rayon

Challis or Challie-Originally silk and wool made in England copied in rayon

Chambray-A type of gingham in plain colors

Chic-High style and individuality

Complementary colors-Opposing colors, those that lie opposite each other on the color wheel

Contour-Outline

Couturier-Designer of costumes

Cowl neck-Hood like drapery at neckline

Crepe-Variety of crinkled dress fabrics

Dimity-Light weight fine cotton fabric

Duvelyn-Dress fabric having suede like surface of wool, rayon, silk, or cotton

Ensemble-All units of a costume

Fichu-Soft folded collar

Flannel-Denotes an all wool fabric

Gaberdine-A fabric of cotton, rayon, or worsted

Gingham-Yarn dyed fabric of cotton

Hues-Primary and secondary colors

Intensity-Color strength compared to white

Jabot-Frill of lace or material attached to front of neckline

Jerkin-Tight fitting coat.

Jersey-Cloth-worsted, rayon and wool; formerly of silk

Jumper-Sleeveless overdress with deep-cut neckline and arm holes

Lawn-Light weight cotton material

Layout-Assembled units to be used in advertisement

Madras-Soft fabric--cotton or rayon

Medium-Any material with which paintings and illustrations are rendered

Moire-(watered) rayon or silk

Monochrome-A single color

Negligee-Lounging garment

Organdie-Thin transparent, stiff wiry muslin (cotton)

Percale-Closely woven printed cotton fabric

Period Costume-Historic costume or style

Peter-Pan Collar-Small turndown collar

Pique-Fabric of cotton, rayon or silk with raised cords running lengthwise

Princess-Silhouette following the curved lines of the figure

Redingote-A coat dress

Rendering-Style of technique. Producing effects through various mediums

Rhythm-Harmony of line and mass

Satin-Fabric with satin weave. May be silk or rayon silk and cotton

Seersucker-Cotton fabric with crinkled stripes

Serge-Fabric of twill weave. May be rayon

Sharkskin-Acetate rayon fabric. Firm, heavy, in plain or basket weave

Silhouette-- The outline of an object or form, filled in solid

Sizing-Filling of starch or clay forced into the meshes of cotton material to give it body.

Snood-Cap or ribbon confining the hair

Spectrum-White light refracted into the colors of the spectrum--violet, blue, green, yellow, orange, and red

Style-The mode; in drawing, the treatment of design or drawing

Stylist-A person trained to recognize styles that will be popular, and forecast style changes. She assists the buyer in making selections.

Surplice-Skirt or blouse overlapping where it meets.

Swagger-Coat falling from the shoulder in flaring lines

Swatch-A sample or piece

Technique-The way an artist uses a medium to give individuality to his work; a style of work

Tempera-Opaque colors mixed with body white pigment

Tint-Light tone of a color

Trend-Tending toward certain influence controlling style

Vogue-Current style

Voile-Thin transparent fabric of cotton, rayon, silk or worsted and of plain weave.

Water Color-A color that may be diluted with water to produce tints, usually transparent.

K. References for Students.

BOOKS

Butterick, Helen Goodrich, Principles of Clothing Selection. The Macmillan Company, New York 1923. Very good on the principles of design proportion, line, emphasis, color pp. 10-21, 121,-135.

Collins, Rose M. and Riley, Olive L. Art Appreciation. Harcourt, Brace and Company, New York, 1932. Art in Dress Chapter V. Fooling the Eye Chapter XII.

Craig, Hazel Thompson, and Rush, O. D. Clothes With Character. Little, Brown and Company, Boston, 1941. Well illustrated. Each topic briefly discussed. Includes all phases of design.

Doten, Hazel Rand and Boulard, Constance, Fashion Drawing, Harper and Brothers, New York 1939. Illustrations for developing technique, figure construction, and reproductions. Excellent. The principles of fashion design briefly discussed with many illustrations.

Evans, Mary Ann, Costume Throughout the Ages. J. B. Lippincott Company, Philadelphia 1930. An excellent discussion of period costume. Well illustrated.

Gallemore, Margaret, Harris Vida, and Norris Maria, Costume Design J. B. Lippincott Company, Philadelphia 1934. A brief discussion of the principles of design and their application. Some illustrated.

Goldstein, Harriet and Goldstein Vetta, Art in Everyday Life. The Macmillan Company, New York 1926. An excellent detailed discussion of the principles of dress design.

Lester, Katherine Historic Costume. The Manual Arts Press, Peoria, Illinois 1925. A complete treatise on costume in all of its phases. Profusely illustrated.

McFarland, Frieda Weigand, Good Taste in Dress. The Manual Arts Press, Peoria, Illinois 1936. Fabrics Chapters XIV, XV. Becoming colors Chapters XVI-XVII, Choosing accessories, Chapters XV.

Rathbone, Lucy and Farpley, Elizabeth, Fabrics and Dress Houghton Mifflin Company, New York, 1937.

Ryan, Mildred Graves-Clothes and Personality D. Appleton Century Company, New York, 1939. Excellent historic costume chart. Pictures of modern clothing for various occasions.

Story, Margaret, Individuality and Clothes Funk and Wagnalls Company, New York, 1930. A very good discussion of basic forms, personality and dress materials. Well illustrated.

Todd, Elizabeth Clothes for Girls, Little, Brown and Company, Boston, 1935. Color discussion quite good.

Warburton, Gertrude and Maxwell, Jane-Fashion for a Living McGraw-Hill Book Company, New York, 1939. Excellent discussion of the various types of work in connection with fashion. Outlines the work of American designers in comparison with designers in Europe.

Young, Agnes Brooks Recurring Cycles of Fashion. 1776-1937. Harper and Brothers, New York, 1937.

MAGAZINES

Fashion Digest, New York City
 Good Housekeeping, New York City
 Harpers Bazaar, New York City

Ladies Home Journal, Philadelphia, Pennsylvania
 Mademoiselle, New York City
 McCall's Magazine, Dayton, Ohio
 Vogue, Greenwich, Connecticut
 Woman's Home Companion, New York City

Harper's Bazaar, and Vogue are mainly fashion magazines featuring the newest in fashion trends. The students can get a great deal of training from analyzing the illustrations, and bringing the extreme ideas into harmony with design for general wear. The Ladies' Home Journal, Woman's Home Companion, Mademoiselle, McCall's and Glamour, have sections devoted to style and beauty which are not as extreme as those in Vogue. All of the magazines stress the idea of fitting clothes to the personality, figure, coloring and amount of money to be expended.

PAMPHLETS AND BULLETINS

Bemberg Exhibit, The American Bemberg Corporation, 261 Fifth Avenue, New York.

Celanese, Celanese Corporation of America, 180 Madison Avenue, New York.

The Romantic Story of Silk. Silk Association of America, 468 Fourth Avenue, New York.

What is Rayon? The Vicosse Company, 200 Madison Avenue, New York.

L. References for the Teacher.

Many of the books listed for pupils and all of the bulletins and pamphlets may be of

great value to the teacher, especially the books devoted to the history of costume, fashion, design, et cetera.

BOOKS

Ashdown, Charles H. Mrs. British Costume During XIX Centuries, T. C. and E. C. Jack Ltd., London

Audsley, George A., Color Harmony in Dress Robert M. McBride and Company, New York, 1922.

Baldt, Laura I., and Harkness, Helen Clothing for the High School Girl J. B. Lippincott Company, Philadelphia, 1931.

Bush, Florence G., and Williams, Frances. Design-Its Fundamentals and Applications. Little Brown and Company, Boston, 1932.

Byers, Margaretta and Kamholz, Konsuelo, Designing Women Simon and Schuster, New York, 1938

Encyclopedia Britanica, Costume-Volume VI.

Gillum, Lulu, Color and Design. Gillum Publishing Company, Kansas City, Missouri, 1931.
Godey's Lady Book, Louis A. Godey, Philadelphia, Pennsylvania, 1830-1877.

Hawes, Elizabeth, Fashion is Spinach Random House, New York, 1938.

Hess, Katherine, Textile Fibers and Their Use J. B. Lippincott Company, Philadelphia, 1936.

Kohler, Carl, Translated by Dallas Alexander K., A History of Costume George H. Harra and Company Ltd. London, 1929.

Lethably, W. R., Dress Design Sir Isaac Pitman and Sons Ltd. London, New York, 1925.

Martini Herbert E., Color When and How to Use It Bridgman Publishers Pelham, New York, 1930.

Munsell, Albert H. A Color Notation Munsell Color Company, Baltimore, Maryland, 1926.

Parsons, Frank A., Psychology of Dress, Doubleday, Page and Company, New York, 1920.

Picken, Mary B., Secrets of Distinctive Dress, The Language of Fashion, Woman's Institute of Domestic Science and Art, Scranton, Pennsylvania, 1939.

Sage, Elizabeth, A Study of Costume; Textiles and Clothing, Charles Scribner's Sons, New York, 1926.

Stote, Dorothy, Making the Most of Your Looks Frederick A. Stokes Company, New York, 1935.

Trilling, Mabel B., and Williams, Florence, M., Art in Home and Clothing, J. B. Lippincott Company, Philadelphia, Pennsylvania, 1936.

Walkup, Fairfax Proudfit, Dressing the Part A History of Costume for the Theatre, F. S. Crofts and Company, New York, 1938.

Weinberg, Louis, Color in Every Day Life Dodd Mead and Company, New York, 1929.

PORTFOLIOS BULLETINS AND PAMPHLETS

Sellner Eudora-Costume Design Twenty-four plates, Forty-eight Different Costumes, from Egyptian through the Victorian period.

American Costume 150 years of style in America 1775-1925-School Arts Magazine Publishing Company, Worcester, Massachusetts.

The New York Times Magazine Section Pageant of First Ladies in Their State

Costumes In the Smithsonian Institute-August 16, 1931

Artistry in Dress, Cornell University, Ithica, N.Y.

Collars and Necklines, Extension Service University of Missouri, Columbia Missouri

Design in Dress, Iowa State Teachers College, Ames, Iowa.

How to Know Color, Extension Service, University
of Wisconsin, Madison, Wisconsin

Use of Color in Costuming
The Use of Line in Costuming, Extension Division
Purdue University, Lafayette, Indiana

IV

TEACHING THE UNIT-ART IN DRESS

CHAPTER IV

TEACHING THE UNIT

ART IN DRESS

A. Overview. The writer spent ten weeks in teaching this unit in art appreciation to a class of girls in the senior division of the Girls' High School at Halleck Hall, Louisville, Kentucky. Before presenting the subject she studied carefully the outline, Art in Dress, did a great amount of reading on dress design, and gained a clear conception of the attainments she hoped to see realized.

The problem was to study personal appearance, and to develop discrimination and judgment in the selection of a personal wardrobe. The key question followed the introduction, and was formulated after discussion: How may I learn to choose for myself the type of wardrobe best adapted to my personal appearance and to the expression of my individuality?

The working out of the problem involved a study of the elements and principles of design as applied to the art of dress; a study of period costume and its influence on modern dress; observation of the good and bad points in the

dress of friends, relatives, movie stars, and others; and a study of personal coloring with relation to color in dress.

Activities engaged in during and after the study will be recorded and explained later in this chapter.

B. Approach. In this class the unit was started through a discussion of pictures showing celebrities familiar to most young people. Previous to the time for the class to assemble, a number of large pictures of prominent people were displayed on the bulletin board. Among the number shown were: Billie Burke, Kay Frances, Katherine Hepburn, The Duchess of Windsor, Janet Gaynor, Greta Garbo, Alice Marble, and Queen Elizabeth.

Spirited conversation went on around the display board before the class was called to order. The teacher opened the discussion by remarking, "The pictures you have just looked at represent people who have put themselves on the front page. What quality do you think they possess which has helped them most to gain the position they hold?" A variety of answers were given; among them, good looks, charm, individuality, family connections, etc.

In the end, individuality was given first place.

This led to the observation that popular fashion magazines, art publications, and women's pages of the daily papers, all emphasize the importance of dress that suits the personality.

At this time the teacher told a story of how an ancient and cultured people (Chinese) regarded all things as having individuality--some showing strength, force, vigor, severity, or sophistication, while other types show gentleness, delicacy, lightness, grace, piquancy, naivete, or youth. The class examined pictures and listened to music showing these opposite qualities. Some of the opposites recognized and discussed are given below:

Flowers

Sunflower.....	Queen Anne's Lace
Zinnia.....	Columbine
Dahlia.....	Orchid
Hollyhock.....	Delphinium

Trees

Oak.....	Birch
Pine.....	Willow
Cycamore.....	Aspen

Animals

Great Dane.....	Pomeranian
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the movie stars (and others famed for particularly appropriate and beautiful dress) learned to select their wardrobes?

When does fashion pass from the common property of all to the individual style of a particular person?

What principles in art, if any, influence the selection or creation of personal costumes?

A study of the wide variety of types of movie stars, and other celebrities, demonstrated the necessity for a wide variety of styles to suit the various types of individuals.

The gamin or boyish type is exemplified by Katherine Hepburn; the ingenue (petite, feminine, winsome) by Janet Gaynor; the exotic or sophisticated (sleek, mysterious, extreme) by the Duchess of Windsor; the romantic (dreamy, sensitive, reticent, reflective) by Greta Garbo; the conservative or patrician (carefully planned clothing and accessories to suit every occasion) by Duchess of Kent. Ginger Rogers represents the athletic type, and Ethel Barrymore, the queenly type.

In every instance, it was observed that the costume had been selected not only with respect to the wearer's personality, but also

to the time and place it was to be worn, and to the activities in which the wearer expected to engage.

Sports clothes, as the name implies, are worn by persons participating in or attending sports; clothes chosen for street or business are of the impersonal or tailored type, expressing distinction rather than prettiness; social costumes are marked by reserve rather than gaudy display.

From this study, questions of self analysis began to arise: Am I conservative or extreme? Should I wear strictly tailored or dress-maker suits? What materials (crisp, firm fabrics, coarse, rough fabrics, or soft, dainty fabrics) are best suited to my individuality? Have I the striking personality which will not be overcome by strong contrasts in design and color, or the quiet one which must depend upon some accent of color for sparkle?

C. Diagnostic Tests. The class's lack of ability to answer these questions, led to the realization on the part of the teacher of a need for some type of test to determine how much of the necessary knowledge, each girl

possessed. The "Appropriateness" test consisted of a large card showing pictures of hats, gloves, shoes, dresses, purses, suits, and other articles of dress for various occasions. Each article was numbered, and an accompanying sheet provided which contained a list of occasions on which the articles might be worn. The number of each article was then placed by the pupil, on the sheet beside the appropriate occasion; for example, "slacks and shirt suit" was placed opposite "beach or picnic" (the only really appropriate occasion for these items); "the tailored suit" was placed opposite "street, school, or office"; "the high-heeled pump", beside "evening-formal."

A second test on "Dress Material and Trimmings" consisted of a mimeographed sheet listing materials and trimmings to be arranged in harmonious combinations.

A "Completion" test on Color, and a "True-False" test on Value and Shades of Color, were given.

It was definitely established from the tests that a review of color was essential to the study of the unit, and that a surprising ignorance of the names and textures of materials

existed among the students.

D. The Problem. The problem which the class proposed (under the teacher's guidance) was then written on the blackboard: "A study of personal appearance, and the principles underlying the selection or creation of an appropriate and becoming wardrobe."

E. Organization for Work. Discussion relative to the best procedure for solving the problem followed. It was suggested by the students that the class be organized in groups, and different phases of the problem chosen by different groups to facilitate the study. Charts and materials could then be handled by the group concentrating on the particular phase involving those items. A general chairman was elected, and she, in turn, appointed girls to head the various committees.

Group I chose to make a study of colors and neutrals; Group II, of dress materials; Group III, of form and line; Group IV, of the principles of design.

The general chairman asked for volunteers to find out how many books and periodicals pertaining to the subject were in the school library. Two girls were chosen to secure the

information, and, later, these girls checked, on the posted list, those that were found.

F. A Study of Color. Since the test revealed a definite need to review color and its possible combinations for harmony, several class periods were spent looking at color charts, colored materials, arranging value scales, and color circles.

1. Source. A brief explanation of the source of color, as used to introduce the study, is given here:

The source of pure color is light. If a ray of light is broken by passing through a glass prism, the colors may be seen in their pure state on a piece of white paper in the following order--red, yellow, green, blue, purple. They are called the colors of the spectrum. These colors in the same order are seen in the rainbow, where they are pure, strong and intense.

Pigment colors which are used in painting, dyeing, etc., are obtained by the chemist from animals, vegetables, and minerals. The appearance of these pigments (paints, dyes, inks, and stains)

varies, depending on the quality of light that falls on them. Pigments are less pure than color (light).

2. Qualities. Color qualities then claimed the attention of the class. Discussion brought out the fact that red, yellow and blue cannot be obtained by mixing other pigments. If, however, they are combined in the proper amounts these primaries (original colors) will produce nearly every other known hue. The other hues examined were: yellow-orange, red-orange, yellow-green, blue-green, red-violet, and blue-violet.

Colored papers were used at this time to determine other qualities of color; e. g., red, red-orange, orange, yellow-orange, and yellow were arranged in one group; blue, blue-violet, violet, green, and blue-green in another.

Through questions and discussion the two groups were compared as to seeming warmth and coolness. The following observations were made; The first group is associated with the sun, fire,

and other sources of heat. These colors are cheerful, stimulating, and conspicuous. They can be seen quickly so we say they advance. The second group of colors is associated with cool water, snow, ice, and distant mountains. They are quiet, restful, retiring. They are not seen quickly so we say they recede. There are some colors between these two extremes which seem to have some of the qualities of both groups, as red-violet and yellow-green, which are called border line colors. The conclusion was made that colors having an element of red may be classes as warm; and those having an element of blue, as cool; and that they vary according to the amount of red or of blue in the color. An excerpt was read from Margaret Story's¹ Individuality and Clothes, which explains simply and attractively the treatment of color behavior as recorded by the physicist.

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1. Margaret Story, Individuality and Clothes Funk and Wagnall's Company, New York, 1930 p. 133.

3. Behavior. It was noted that the brightest red, yellow, green, blue, and purple, are not equally bright. The brightest red is the most intense; then, in order, come the brightest yellow, green, blue, and purple. Conversely, the brightest red, yellow, green, blue, and purple are not equally dark. The brightest red and green, are about middle value, the brightest yellow is light in value, the brightest blue and purple are dark in value.

As the colors were observed it was seen that there are many varieties of red, yellow, green, blue, and purple. In reds, for example, there are light reds (pinks), middle reds, dark reds, and many shades between; there are bright reds and grayed reds of many gradations; in other words, there are many degrees of value (light and dark) and of chroma (intensity).

4. Description and Classification.

In conclusion, description and classification of colors entail stating the hue, the value, and the chroma.

To describe a dress as red, leaves its value and intensity in doubt. To describe it as a light grayed red, classifies it, so as to enable another to visualize its approximate color.

The use of black, white, and gray (the mixture of black and white) requires as much care as does the use of colors. To reinforce this statement, two charts were observed showing how middle-gray and red are affected by different values of gray. There were four squares of gray, ranging from light to dark, on each chart. In the center of each square was a small square of middle-gray. It was observed that the small square contrasts most strongly with the darkest value.

A similar chart, having small squares of middle-red (instead of middle-gray) was examined. Study of the colors here revealed that the small square contrasts most strongly with the lightest value.

Small samples of neutral papers

which had been given to each pupil, along with colored samples, were then examined. Various arrangements of the different values of neutrals were tried, and the effect noted; e. g. (1) black and white side by side; (2) light and white side by side; (3) low-light, middle, and dark close together; (4) black, dark, and middle close together, and so on.

Questions asked by the teacher were: If you were planning to make a layout (plan for an advertisement) for a perfume, which combination would you use? Which combination would you use for an adding machine?

The choices varied as to hues, but all chose a light and subtle arrangement of values for the perfume layout, and a dark contrasting arrangement for the adding machine. Pictures of advertisements of perfumes, as those for Elizabeth Arden, Coty, and Houbigant were found to bear out the judgment of the class, as did also the pages showing Monroe's Comptometer and other similar machines.

Each pupil was then asked to arrange a value scale with her neutral samples of paper, beginning at the top of the page with white and ending with black at the bottom. When complete, there were nine steps in value, which read: white, highlight, low-light, middle, high-dark, dark, low-dark, black.

The color circle was also arranged according to the value of the colors. The value was determined by matching that of each standard color with that of neutrals in the value scale. When finished, beginning with yellow at the top, and reading clock wise, the colors appeared in the following order: yellow, yellow-green, green, blue-green, blue, blue-violet, violet, red-violet, red, red-orange, orange, yellow-orange.

The above colors are basic and from these are made the many shades (darker than normal value) and tints (lighter than normal) employed in the commercial world of color. The import-

ance of the color wheel with its measured values and intensities cannot be realized until it is more definitely related to familiar commercial names (such as cornflower, orchid, putty, bottle-green, tangerine, and chartreuse) used by textile dealers and the general public. The United States Textile Association of America, New York City, has made a chart which lists all of the standard commercial colors with an analysis of their individual hues, values, and intensities in a manner easily related to the color wheel and its theoretical scales of measurement. They also construct each year seasonal charts of the new fashionable colors for spring, summer, autumn, and winter, respectively.

There are two groups of commercial colors--the standard, and the transient. The standard consists of colors that have as their source some definite object that may be referred to at any time for exact verification of the color: as, golden-rod, tobacco, turquoise, and salmon-pink. The transient group is

one that is dictated by fashion's whims, ever new and changing. Often it represents standard colors under different guise, and the colors may be identified with the nearest standard color; but a great many names are suggested by current events, names of prominent people, etc. Some of the transient colors are beautiful and generally becoming.

The danger of highly popularizing a certain transient color is that people may (and usually do) adopt its use indiscriminately, without regard to becomingness. Furthermore, a transient color thus overpopularized, dates a garment, that may be otherwise practical for many years, and limits its service to the brief period during which it is the extreme of fashion.

5. Names. The sources of the most used standard color names were studied. A few of these sources and the resultant color names are here listed: Flowers--geranium, wisteria and magenta; birds--

dove-gray and peacock-blue; food--tomato red, chocolate and olive; fruits--peach, plum and tangerine; wine--burgundy and claret; woods--mahogany and walnut; plants--sage, straw and henna; water--aqua-marine, mist, and channel-green; furs--seal, fawn and otter; jewels--jade, coral and sapphire; minerals--brick, terra-cotta and slate.

A chart showing one hundred twelve commercial colors was examined and then posted on the bulletin board for future reference.

6. Personal Coloring. It then became apparent to the girls themselves that they lacked adequate bases for individual diagnosis. It was therefore suggested by the group that each girl prepare a chart of individual characteristics for herself, and that it be so constructed that additions and alterations could be made as the study progressed.

Each girl, with the aid of a small mirror, made a personal color value

study, and recorded observations on her chart in the following manner:

Personal Coloring Value Chart

Type	Tone of Hair	Eyes	Tone of Lips	Tone of Skin	General Value
Pale blonde	Light	Light	Light	Light	Light (close harmony)
Fair brunette	Black or brown	Dark or medium	Med. dark	Fair	Contrast
Inter-mediate	Medium dark	Medium dark	Medium dark	Medium light	Middle (slight contrast)
Olive brunette	Black or very dark	Low dark	Dark	Dark	Dark (close harmony)

The study of the value of personal coloring, as an aid to the selection of personal costume, is perhaps the most valuable of the various devices employed for that purpose.

7. Harmonies and Contrasts. The use of colors to the best advantage in expressing a basic plan or idea next claimed the attention of the class. It has been mentioned before that when working with color, it is well to decide what general effect is sought and what conditions are at

hand to be satisfied; for example, is it purposed that the result shall be stimulating or restful; bright or dull; loud or quiet; cool or warm; harmonious or contrasting; striking or unobtrusive?

Each member of the class had been asked to wear her favorite school costume and bring some extra accessories to exchange with others during the class period. A wide variety of beads, bows, scarfs, and other accessories had also been collected by the group concentrating on color.

The following mimeographed set of questions had been placed in the hands of each pupil to guide the observation and direct the discussion concerning the costumes worn:

I. General effect

- (1) Is it quiet or loud?
- (2) Is it stimulating or restful?
- (3) Is it bright or dull?
- (4) Is it cool or warm?
- (5) Is it harmonious or contrasting?
- (6) Is it striking or unobtrusive?

II. Relation of color in costume to that of the individual.

- (1) Is the costume becoming? Why? If not, why not?
- (2) What use of Personal Coloring Chart can be made in this part of the study?

The costumes worn by the various pupils were studied and discussed; for example, the most striking costume was chosen for discussion first. It consisted of a dark green dress worn with scarlet beads, black shoes, and beret with a dash of red.

Some of the observations, expressed by the girls, follow:

It is stimulating, bright, and in general cool. It is striking. The girl wearing it looks well in it because her personal value and color scheme is contrasting (dark hair and eyes and fair skin). Other similar contrasting costumes discussed were russet with turquoise, and blue with brown accents.

Another costume selected for study was a gray yellow suit, gray blue blouse, terra cotta purse, and lapel ornament; shoes and beret were navy blue. Remarks,

including the following, were noted by the teacher:

This costume is striking, and in general, warm (more of the gray yellow and a little of the shade of red). It is becoming. The girl wearing it has medium brown hair, brown eyes and a clear light skin. She has sufficient personal color contrast to wear this color scheme.

Several costumes were considered too vivid for the individual. Among them was one consisting of a brilliant red blouse, a dull green skirt, and a red bow in the hair.

The chief criticism offered was that the rather loud contrasting color arrangement seemed too strong for the person wearing it--a girl with drab light hair, gray eyes, and rather light skin.

Other combinations, showing harmony rather than contrast, were examined: Navy blue dress, yellow green ornament on a navy hat, yellow-green scarf, and dark blue shoes; a gray suit, blue

sweater, black shoes, and black beret; a dark blue dress, light blue collar and cuffs, dark blue shoes, and hat. These schemes are all quiet and harmonious. It was then apparent that colors producing the effects just discussed follow certain patterns which are capable of a wide variety of uses, and that the color schemes fall into two general classes--related and contrasting.

The related color schemes give a quiet restful effect, if strong value contrasts and strong intensities are avoided. These schemes may consist of one color or a monochromatic arrangement, as found in the costume of dark blue, medium blue, and light blue; or the neighboring (analogous) color arrangement, as was found in the navy blue dress with accessories of yellow-green. In the latter case, blue is the common color. Another example is found in the costume of grayed blue-green, green, and blue-violet. Blue is the color common to

all of the group. Several of these examples were located on the color circle.

It was discovered by the class that color schemes of contrasting colors may be composed of opposites, as red and green, blue and orange, violet and yellow, etc., or they may be of one hue and the two hues located on each side of its complement, as yellow with red-violet and blue-violet. The split complement contrast is less shocking than the simple, complementary scheme. Other combinations of the last named type were located on the color circle.

The most brilliant of the contrasting schemes is the triad, such as that seen in the costume of grayed yellow, blue, and terra cotta (red). These colors form an equilateral triangle on the color circle. Other examples were found and discussed.

With the extra accessories all of the color combinations just described were arranged. In addition, the neutral

harmonies were observed, such as, gray with black; tones of gray with shades of gray; black and white, etc. Each of the neutral harmonies were changed into an accented neutral by placing on it, in turn, a bright red flower, a red scarf, and a jade green clip.

Activities involving the use of these principles of color harmony and value were carried out as follows:

(1) Each pupil made a simple diagram in her note book of each harmony and labeled it properly.

(2) Each pupil arranged and pasted a neutral value scale and a color circle in her note book.

(3) Multiple examples of each of the following were found, mounted in the note book, and labeled properly,

- (a) Neutral harmonies
- (b) Accented neutral harmonies
- (c) Monochromatic harmonies
- (d) Complementary arrangements
- (e) Split complementary color schemes
- (f) Triadic color schemes.

(4) A picture of a garment showing strong value contrast and one showing subtle or close contrast were mounted

in the note book.

(5) A page of clippings of pictures of landscapes in different value arrangements was made. Under each was written the effects produced by various methods of value treatments.

The next step in the study of color was a mutual analysis among the pupils to discover the type to which each belonged. Discussion of value disclosed that some girls were lighter than others in skin tones, eyes, and hair. In this analysis each pupil studied her own coloring also, with the aid of a mirror. By comparing the natural tones of color in the lips and cheeks it was found that some had coloring close to violet, while others had coloring which tended toward orange. Those with violet tones are fairer than those with orange tones, and are called blondes. The ones with orange tones are brunettes. Those in between the two are classed as intermediates.

By further study it was found that

variations occur in each type. The class known as blonde includes a wide range from golden (yellow) hair, which is warm in tone, to the ash or platinum which is comparatively cool. A chart was made of the most definite types. All took part in the activity and made contributions. One pupil recorded observations on the board. These were copied later in the note books for future references.

8. Color Types. The following Chart Description of Color Types was offered as a guide for personal reference.

Description of Color Types

Type	Skin	Hair	Eyes
Ash blonde cool	Clear Red-violet tones	Silvery yellow	Light blue or blue- gray
Pale blonde cool	Pale, often cloudy Yellow to yellow-violet	Dull, light yellow	Light blue or gray
Vivid Blonde cool	Clear vivid red-violet or red-orange	Vivid yellow or yellow-orange	Medium blue green or gray
Pale brunette warm	Light red-orange	Medium brown or dark brown	Light or dark brown
Vivid brunette warm	Medium red-orange suntan tones	Brown, black or blue- black	Medium or dark brown
Olive brunette warm	Subdued yellow-orange oriental type	Brown, black or blue- black	Medium or dark brown
Intermediate Type 1	Clear vivid red-orange or red-violet similar to vivid blonde	Brown, black or blue-black similar to vivid brunette	Medium brown or dark brown
Intermediate Type 2	Vivid red- orange or red-violet	Vivid-yellow or yellow- orange	Medium brown or dark brown
Intermediate Type 3	Clear red- orange or red-violet	Brown, black or blue black	Medium blue, green or gray
Intermediate Type 4	Medium red- orange suntan	Vivid yellow or yellow- orange	Medium blue green or gray

A study was made of colors suitable for each type. Two girls handled the colored materials draping them near the face of each girl who had volunteered to represent her type. At first, extremes in color were used, so that the observers could more easily see the changes caused by the use of color. The procedure was as follows:

1. From the coldest color to the warmest (that is, from clear cold blue to red orange); then from one intermediate color to another (as from blue green to red violet).

2. From white to black, and then from white and black, respectively, to the middle values--medium gray, lowlight and high-dark.

3. From the brightest to the dullest colors, and then from each of these to the middle intensities.

In this way the most striking effects become apparent, and the eye is trained to recognize the subtle effect, which the different colors bring out in the hair

and complexion of the individual.

The next part of the demonstration consisted of trying varying tones and shades in a wide range of values and intensities of each color. Wherever possible the following order was used: One color was tried in three intensities and three values on each type; as--

Hue	Value	Intensity
1. blue	light	intense
2. blue	dark	gray
3. blue	medium	slightly gray
4. blue	light	gray
5. blue	dark	very gray

Those observing were guided by a few questions which had been written on the board before the demonstration.

1. What effect does the hue have on the appearance of the skin? What does the value do? The intensity?

- a. Does it add needed color?
- b. Does it make it seem more clear?
- c. Does the skin look too red?
- d. Does it drain the color from the face?
- e. Does the skin look too yellow?
- f. Does it intensify blemishes such as freckles or other defects?

2. What does the hue, value, and

intensity do to the hair?

- a. Do they make the hair look drab?
- b. Do they add luster?
- c. Do they clash with the color of the hair?
- d. Do they make it seem darker?
- e. Do they make it seem lighter?

3. What do the hue, value, and intensity do to the eyes?

- a. Do they bring out the color of the eyes?
- b. Do they make the eyes seem pale?

The class then examined portraits and pictures of idealized women by famous artists, to see how they used color to express types and enhance personal coloring. The artists studied were:

Gainsborough	Marie Laurencian
Boucher	Titian
Berne Jones	Benda

Some of the chief characteristics of their work are given here:

Titian painted red haired women in red, but with a definite henna cast just duller than the lady's locks. It made the hair glow and the skin seem very white. In some of the portraits (notably that of his daughter) he also

placed dull sage green (the complement) in the background.

Some other Renaissance artists painted the olive skinned Latin type of Florence and Venice in deep soft blues. Those with yellow skin and high color carry blue extremely well.

Gainsborough, in his Duchess of Devonshire, used heavenly blue and old rose, as did Boucher in his Madame Pompadour. This combination shows how both brought out the pink and white cosmetics, and emphasized the powdered wig.

Burne Jones (the pre-Raphaelite) dramatized the ash blonde with delicate fir green draperies that brighten the hair.

Benda (modern illustrator) has glorified copper-haired girls with amber and peacock green. The amber, keyed lower than the hair, permits the latter to dominate the costume, while the peacock-green by contrast, throws it into dramatic relief.

The following color chart and list of remedies for defects were prepared:

CHART OF BECOMING COLORS
FOR VARIOUS TYPES

Type	Becoming Color	Value	Intensity	
Ash Blonde eyes light blue or gray, light skin, hair colorless	green (bottle)	high-dark	slightly gray	
	yellow-green	light	slightly gray	
	emerald green	low-light	slightly gray	
	blue green	high-dark	slightly gray	
	violet			
	red-violet (wild rose)	light	full	
	white ivory			
Vivid Blonde fair skin, rosy cheeks, eyes-blue, green, or gray	blue(turquoise)	middle		
	green	light		
	violet	light		
	red	light	slightly gray	
	yellow	value of hair		
	brown (russet)	dark		
Pale Brunette brown hair, warm tan complexion medium brown eyes	red	middle	slightly gray	
	red-orange	middle		
	yellow-orange	middle		
	blue	middle		
	green	middle	grayed	
	brown	middle		
	yellow	middle		
Vivid Brunette skin medium red-orange, eyes, brown, hair dark-brown, or black	red, red-orange from		slightly grayed	
	orange, yellow	light		
	beige, wine	to		
	dark-brown	dark		
	blue	dark	full	
	navy blue	dark	full	
	gray, green	dark	full	
Olive Brunette yellow-green skin, dark-brown or black hair, dark eyes	wine, beige	middle	grayed	
	red	and		
	peach	dark		
	brown with orange	middle	gray	
	cast (coppery)			
Intermediate I dark hair and eyes, fair skin	All colors good	dark and middle light	intense	
	Intermediate 2 light golden brown hair, fair skin brown eyes	All colors good	light medium and dark	slightly grayed

Demonstration with colored fabrics in relation to personal coloring, revealed some definite problems to be met and overcome, as:

1. Too much yellow in the skin
2. Pale eyes
3. Flushed face
4. Lack of value contrast in hair, skin, and eyes

Suggestions were made by the class for the solution of the problems. One was to emphasize the best features, and attempt to suppress unattractive qualities. Some of the suggested methods of accomplishing this end were:

1. To subdue yellow skin (emphasis by repetition) avoid wearing yellow; avoid wearing purple (purple intensifies by reflection its complement, yellow): avoid bright colors, tans and grays near the value of the skin, and unrelieved black near the face.

2. To enhance the color of the eyes, use a darker, duller tone than the color of the eyes. If a large area of this tone is used (as in a coat or dress) a small bit of bright color (as in a clip, beads, or small scarf) will

serve to further emphasize their color.

3. To subdue color (red or flush) in the face, wear dark values, grayed colors, or black.

4. To emphasize the color of the hair, use value contrasts, as black, white, or any color darker or lighter than the hair; use duller color of nearly the same hue as the hair; use the complementary color preferably lighter or darker than the hair. For red hair, which is yellow-orange in tone, the complement is blue-violet; for auburn, which is red-orange, the complement is blue-green; for golden hair, the complement is violet or blue-violet.

5. To subdue the color of the hair, use the same hue, or a neighboring hue of slightly darker value, as exemplified in Titian's portrait of his daughter.

Other suggestions for solving the problem of personal inconsistencies or defects were listed as follows:

1. Persons of warm type with
sallow skin should choose dull warm
colors.

2. Persons of cool type with
sallow skin should choose dull cool
colors.

3. In either case a large area
of dull color with a small bit of in-
tense color for accent should be chosen.

4. If the personal color scheme
is delicate (pale blonde) medium con-
trasts and pastels should be worn.

5. Persons having fair skin,
dark hair, and dark eyes (pale brunette)
should wear more intense colors and more
striking contrasts.

Among the observations expressed
by the students were: To repeat in the
costume the personal color tends to
increase its beauty; to keep the large
area of color a key or shade lower
(paler) than the color of the hair (if
the hair is colorful), is a secret of
success; to employ contrast by use of
strong brilliant colors, emphasizes
dark beauty of hair.

Again, most colors used in clothing are slightly grayed; individual color is a determining factor in a color harmony, and value and intensity play an important part in effecting such harmony.

G. Textiles. Though color is one of the chief factors in the selection of costumes, it is by no means exclusively so, for materials are second only to color, and the two are so closely connected as to be difficult of separation.

Texture, one of the important elements of design, cannot be studied apart from material of which it is a leading characteristic. Texture appeals to the sense of touch, whether by actual contact or by mere power of suggestion. Velvet not only appears soft to the eye, but it suggests a softness to which the observer is quite as keenly sensitive as though he were actually handling it. Organdie looks sheery, crisp, and wiry, but it also appeals to the sense of touch through these same characteristics.

Having become acquainted with the place of color in the study of art in dress, the class then turned its attention to materials. Certain

students had assembled short lengths (as well as small samples) of materials, scarfs, and accessories. The short lengths were exhibited, and their chief characteristics noted. One pupil recorded the observations of the class on the blackboard, as follows:

Name of Material	Example of Texture
velvet, suede, etc.	soft and yielding
heavy crash, lame, etc.	harsh and hard
tweed, homespun, etc.	rough and shaggy
satin, fine percale, etc.	smooth and lustrous
flat crepe, celanese, etc.	fine and draped
heavy dress linen, cotton shantung, etc.	coarse and rough
chiffon, georgette, etc.	light and soft
mohair, tarleton, alpaca	wiry and coarse

The costumes worn by members of the class also afforded a variety of materials for study, most of which were easily recognized and named.

Many different kinds of materials were examined and compared. Two samples were held together, and the effect observed with a view to their possible use in a costume; for example, plaid gingham and pique; then, the gingham and a length of lace. It was agreed that the gingham would look well with pique trimming (as collar and cuffs), because the two materials

have various points of similarity; for example, both are cotton; both are of firm, smooth texture; both have lines; etc. A further reason is that the two have many points of effective contrast. The gingham has a decided pattern while the pique has almost no pattern; the lines in the gingham have two directions and several widths, while those of the pique are of uniform width and have a single direction; the gingham has a greater degree of smoothness than the pique, which is slightly corded.

Between the lace and the gingham there is not enough of similarity in texture, and too much similarity of design (since both have decided patterns). The soft, elegant effect produced by the softness and the curving pattern of lace is incompatible with the simple, smooth sturdiness of the gingham.

Yard lengths of materials were draped and the following points of observation noted:

1. The draping possibilities (e. g., rayon, in satin and knitted weaves, falls in soft graceful folds; pique, in stiff, straight lines; tulle, also, drapes in soft folds, while net and organdie stand out in stiff, angular folds.)
2. Suitability of texture to the figure.

3. Suitability of the material to the complexion.
4. Appropriateness of material to the occasion on which it is to be worn.
5. Suitability of material to the type of dress.
1. Types of Fibers. Brief reports were given on animal, vegetable, and synthetic fibers, and some of the innumerable variations resulting from different processing in factories; such as, sizing, preshrinking, permanent crisp finish, etc.

Since synthetic fibers are a comparatively new development in dress materials, these were given particular attention in the reports.

From the report made on synthetic fibers, the general discussion which followed, and the different varieties of synthetic materials which were examined, the following summary was made:

1. Rayon is a term used for a variety of materials made from synthetic fiber. Synthetic fiber is compounded in the laboratory and is an artificial product.
2. There are four methods of

rayon manufacture, but the basis for each is cellulose.

3. Cellulose is usually wood pulp or cotton linters (line that clings to the seed).
4. The cellulose is cleaned, chemically dissolved, bleached, and while in a liquid state, is forced through fine openings in a long tenuous thread or filament that solidifies on contact with the air. These fibers are chemically treated and later woven into cloth.
5. Dress materials, made from spun rayon by a process of cutting and twisting the yarns, may be laundered more easily than the older types.
6. Synthetic materials are difficult to recognize because they resemble linen, wool, silk or cotton. They may be dull or lustrous.
7. Many mixtures are found, such as wool, cotton, and synthetic fibers in the same piece of cloth.
8. The appearance of a fabric is sometimes the result of treatment given it during the manufacturing process.
9. Each fabric has characteristic qualities which determine the style used in making it into garments.
10. Synthetic material is growing in popularity because it can now be made to look like silk, linen, wool or cotton. It is often mixed with other fibers and whether in this form or in its pure state is cheaper than pure silk and wool. It wears well if handled properly when laundered.

2. Weaves. Diagrams of different weaves were made by the pupils, and these were paralleled with materials matching each of the weaves; as, plain weave, chambray; satin weave, sateen; pile weave, velvet; etc.

A list of the most popular dress materials was copied in the note books; and a sample of each, with a brief description, was mounted beside each name in the list.

The pupils, then, all groups working together, filled out, and arranged alphabetically, filing cards in the following form, for all materials studied:

<u>Silk</u>	<u>Name of Material</u>
sample of goods	crepe de chine
	<u>Characteristics</u>
	lustrous, crinkly
weave	<u>Other Information</u>
width	crepe from China

The cards were then added to the permanent collection of art materials in the Art Department at Halleck Hall.

Each pupil made a list of materials she would use if she were making each of the following garments giving reasons for her choice: a school dress for winter, for spring, and for fall; pajamas, shorts, a sport coat, a dress coat; a tailored suit; a summer evening dress; a dinner suit; a winter evening dress; an evening wrap for all the year round, and one for winter only.

After the exercises just described, the following summary was made by the pupils, and recorded on the blackboard:

1. People who are overweight should wear textures that are soft rather than rough or wiry; dull, rather than lustrous; clinging, rather than stiff or having angular folds. They should wear fur with short hair rather than long, and such materials as voile and dull crepe rather than organdie and tafetta.
2. Very slender people may wear fabrics that are shaggy, rough or stiff, or wiry, as tweed, organdie, etc., materials that are soft and deep, as velvet, duvetyne, etc.; and furs with long hair.

H. Line. While materials are a highly important element of design, line is also an element that must be studied and appreciated.

Line includes the outline of the garment and its cut, as well as trimmings, seams, edges, and drapery. Various types of line--vertical, horizontal, curved and diagonal--were studied through the use of charts, fashion magazines, and the clothing worn by the pupils in the class.

It was observed that each line has definite characteristics; for example, a garment made up principally of vertical lines, such as an unbroken panel from shoulder to hem, long rows of tucks, or narrow pleats from the yoke to the bottom of the skirt, and other similar forms, not only add length but lend an air of simplicity and dignity to the garment.

The horizontal line has the opposite effect to that of the straight vertical line. It is exemplified in the square neckline, the dress yoke, the belt, the bottom of the sweater, or jacket, and the skirt hem and is used to break the length of the vertical line, with which it combines to achieve balance.

In a costume predominantly horizontal in line arrangement, the effect is toward the informal, and induces a sense of breadth.

Curved lines appearing in neck lines, yokes, arms' eyes, the bottom of jackets, and in folds and gathers, are important as transitional lines--those connecting horizontal and vertical lines. Transitional lines suggest rhythm, which causes the eye to travel easily from one part of the garment to another, and lends grace to the costume.

Diagonal lines are seen in the V point neck, at the bottom opening of the single breasted jacket, and in skirt yokes.

It was observed by the class that lines of the V arrangement have the peculiarly powerful characteristic of forcing the eyes to focus at the point of convergence. In striped materials diagonals may be employed in a wide variety of arrangements, but generally speaking, the longer the diagonal the greater the apparent length becomes.

The study of line revealed that in the best examples the main structure of the dress is free from all unnecessary lines that might interfere

with its beauty of silhouette or gracefulness. Contradictory lines are avoided in the best designs. The garments with round, square, or pointed necks, and trimmings used in opposite directions, give a feeling of unrest and a lack of dignity, while the trimming used in harmony with the general line arrangement keeps the garment well balanced.

Independent work done after the previous discussion and observation of line consisted of the following activities:

A. The pupils found, in the advertisements of the daily papers, or in fashion magazines, examples of costumes that showed line design with emphasis on (1) straight vertical lines, (2) horizontal lines, (3) horizontal lines combined with curved lines, (4) fussy, weak curved lines, (5) strong, rhythmic, curved lines, and (6) diagonal lines. These examples were mounted, and labeled.

B. Each pupil selected a costume figure that she considered pleasing in line design, and traced it in outline to illustrate the silhouette. She then made a second tracing to illustrate the line pattern. Both patterns

were mounted on sheets of drawing paper and properly labeled.

C. Each pupil selected from a fashion magazine a costume she would like to wear. She made a tracing of its line design. She then studied its contour, and the size and variety of the shapes in the design. If she thought she could improve it by changing the line pattern, she made an effort to do so. These tracings, too, were mounted and labeled correctly.

The above examples when completed were displayed on the bulletin board where the class could observe and discuss them. The good and bad points were noted and suggestions for improvement were made.

I. Form. Form (mass or silhouette) is closely connected with line. It is studied through charts, costume cuts, and portraits. Costumes of the elite of the various periods of history, were studied from the standpoint of style. Included in the study were those of Theodora, wife of Justinian, Anne of Clives, one of the wives of Henry VIII, Queen Elizabeth, Marie Antoinette, the Dutchess of Devonshire,

Martha Washington, Mary Todd Lincoln, and others. The terms style and fashion must not be confused. Discussion brought out that by style is meant treatment of design. Fashion is the popularity of a certain style.

As the study of charts and costumes progressed, it became apparent that dress design may be classified as to basic forms under such headings as the oval, the circle, the square, and the rectangle. It was observed, however, that the principle change in shape occurs in the skirt form first, then other parts of the garment are changed to parallel its altered design.

The most used form throughout the history of dress was observed to be the bell (a form of the oval) and the tubular (rectangle) shape. The bell shape with the figure in the middle of the bell, and the bell shape with the figure at the front of the bell, held away for years, fluctuating between wide and narrow treatments, between long and short treatments, and so on. The tubular shape has been in vogue, with variations, since 1910.

1. Period Costume. Points of similarity between the costumes of past ages and those of the present day, also between costumes of two widely separated historic periods, were noted. Those of the year 1600 were compared with those of 1850, and again, with those of the present day. Design which conforms moderately well to the human form, as the costume of the Middle Ages in Europe, was adjudged simple and pleasing. Pictures of Theodora and of Queen Isabella of Spain exemplify this type of form and line. By comparison, costumes of Queen Elizabeth of England and those of the gay nineties in America were thought to be elaborate and overstyled.

One of the most interesting phases of the study was recognizing and tracing developments of a certain era to inspirations and influences of an earlier period. It is a generally accepted fact that costume and architecture are

often traceable to the same influence. In many countries, there is a definite resemblance between the buildings and the head gear: for example, in Hawaii, the grass huts of the early inhabitants are strikingly similar in form to the hats of the natives; the turban of the Eastern Church dignitaries are clearly the inspiration for the modern colored turbans recently so popular, and their shape resembles closely the domes of the ancient mosques. The horn-like head-dress (the hennin), worn during the time of the Gothic architectural development, partakes of many of the characteristics of that architecture.

One of the most enjoyable activities resulting from this phase of the study, was the preparation of a list of modern adaptations and the tracings of them to their ancient, historic inspirations, as follows:

Adaptation	Inspiration
The turban	The mosque dome

Modern heart-shaped hat with upward sweep	The hennin (of 15th C.)
Modern bonnet (veil around throat)	Poke bonnet of 18th C.
Hair nets and snood	Snood of the early Renaissance.
Modern "pill box"	The fez of the Turks
"Sweetheart" neckline	Neckline of time of Henry VIII as seen in portrait of Anne of Clives.
Jabot (double frill)	Beau Brummel jabot (French)
Lounging pajamas	Turkish trousers
Modern sandals	Old Roman sandals.
Gauntlet gloves	German hand armor-1200 A.D.

Many other interesting items may
be added to the list.

Every season many costumes are
presented which reflect the influence
of earlier epochs. Motion pictures,
with old historic settings, have done
much to revive old fashions. Noel
Coward's Conversation Piece revived
the high waistline, poke bonnet, little
jacket, and flat heels of the Regency
Period; Cleopatra, starring Claudet
Colbert, was responsible for the modern
flair for costume jewelry, and other
attractive accessories.

Resulting conclusions were that
period dress is basic in dress design,

and that its recurrence at intervals is indicative of its fundamentally artistic design. Many of the old names for parts of period costume, obtain today in their original application; as, Polonaise, Moyen, basque, Empire, trumpet, princess, peasant, peg top, and sheath.

It must be remembered, however, that all fashion expressions require accurate research by the designer, who must be able to adapt the old fashion faithfully when using it in new ideas and new forms. The new style must be a composite of the best points of the old and the harmonious new.

A significant report was given on how some modern fashion designers work. Elizabeth Hawes, who drapes the material on dressmaker's forms, thus creating the design with the actual material, was given special attention. There were others who conceive the idea, work it out on paper, and give it to a

dressmaker for execution. The kind of sketches used by dressmakers were discussed. The one comparable to the architect's plan shows how a dress is cut and shows every detail; the other displays only the finished sketch. In the latter, the whole human figure is drawn carefully; to this, the costume is added, and then the whole sketch colored.

Designs by some well known artists in the field of fashion were found in magazines and were examined. Among them were some by Adrian, by Travis Benton and by Bernard Kelley, all of whom are designers for the movie stars. Other designs studied were by Hattie Carnegie, Elizabeth Hawes, Muriel King, prominent New York designers, and Schiaparelli, Lanvin, and Lelong, European designers.

J. Pupil Activities. Following this study, the girls who wished to do creative work along this line sketched basic designs for various types of sleeves; such as, the box (tailored), the raglan, the epaulette, the

saddle, the Juliet, the kimono, the dolman, and the peasant; skirt forms were also sketched; as the six-gore, godet, Polonaise, inverted box pleat, tiers, culotte, circular tunic, and four-gore; waist designs, as jumper, bolero, jerkin, pinafore, basque, cardigan, surplice, decolete, and shirtwaist, were drawn. Neck lines were also studied: Sweetheart, cowl, Peter Pan, bertha, ascot, revers, fichu, shawl, and tuxedo were among those sketched.

Each girl in the class found pictures of several period costumes, and modern costumes showing historic adaptations. These were mounted in the notebooks with notations concerning the adaptation.

The application of the principles of design has been considered briefly along with the elements of design, but it is well that the student should have many opportunities to observe, to discuss, and to use these principles (proportion, rhythm, balance, and harmony) in order to fully appreciate their importance.

Costumes worn in the class, charts illustrating the various principles, dress designs created

by talented pupils, and ensembles, arranged by pupils of lesser ability, afforded a variety of examples for observation and criticism as well as for actual use.

The average pupil did less of the creative work and more adaptation of dress design (through the use of fashion magazines) to her individual requirement. A minimum of one sheet in pencil technique portraying various types of materials, such as tweed, voile, taffeta, pique, etc. was required. The brief explanation following may serve to give the reader some idea of the work carried on by this group.

Each pupil took an article of clothing in some decided hue and built an ensemble for herself. A brief statement accompanied each article giving reasons for choice. Time was allotted for analysis and general class discussion to familiarize the group with the wise use of the principles of design; for example, one girl chose as her basic article a string of bright, red, shiny beads, another, an amber pin; other choices included a hat, a dress, shoes, a coat, and so on. To illustrate the procedure two examples are given here. The coat motif con-

sisted of a tailored sport model of tweed, which in color was predominantly dark gray, but flecked with red and green. It was semi-fitted and lined with bottle green. The girl for whom the dark ensemble was to be worked out was of medium size, with very dark hair, dark eyes, and clear dark skin. The first ensemble was selected for fall wear. It consisted of the following choices: Dress of bottle green, sheer wool, tailored style; a small black felt hat with a tiny red and green feather on one side; shoes of black leather and cloth with medium heel in a sport model; an envelope leather bag in red; and a clip (to be worn at the throat) in matching red; a small red knitted wool scarf (to be worn ascot style), and black washable fabric gloves. A second combination using the same coat was worked out for spring, as follows: Dress of tomato red, small black straw hat with a saucy red bird perched on the crown, black patent leather pumps with Cuban heels, black patent leather bag with red clasp, black fabric gloves.

Other activities engaged in by the group included the selection of a picture of a plain

basic dress (one which could be changed by changing accessories) and mounting it near the center of a piece of drawing paper. On one side was ranged the proper accessories (hat, gloves, shoes, purse, etc.) which should be worn with that dress to a foot ball game. On the other side were listed the accessories for other occasions, such as an informal afternoon party, a Sunday supper, a trip, etc. Each ensemble was labeled properly. These examples when completed were also displayed for general discussion and criticism.

Some of the most talented pupils learned the technique of depicting fabrics and furs with pen and ink, and with a combination of pen and brush work. Some designs were colored with transparent water color, others with opaque (show card), and still others with colored inks.

Each of the pupils in this group constructed a lay-figure (a human figure to be traced repeatedly for use in testing different costume designs).

Some of the designs created and colored by the superior group are listed below:

1. A simple one-piece dress was designed by each girl for herself. Different accessories were designed to alter the appearance of the costume for different occasions.
2. The basic evening dress was designed on the simple form of princess silhouette, with slightly flared skirt. Hues varied, but blue, rose, beige, and black predominated. Accessories, including small jackets, short capes, scarfs, flowers, clips, necklaces, chiffon handkerchiefs, and jewelled belts in sets of harmonizing colors were designed.
3. The dress for daytime wear, and for informal evening, was designed on conservative, but not severe, lines. The colors chosen were black, navy blue, or brown. The V-neck and short sleeves were favorite features. Among the most popular accessories were tailored collar and cuff sets in white, and in various colors and materials; scarfs and belts in matching colors; costume jewelry including large clips, bracelets to match, beads, earrings and purses in appropriate materials.

The daytime dress, when adapted to afternoon wear, showed collar and cuffs sets of frills and lace, satin and crepe, in white and pastel shades. Accessories (belts, clips, bracelets, purses, etc.) were designed in matching or contrasting pairs. Capes or jackets in the prevailing mode were used. Hair ornaments and costume jewelry were appropriately designed and colored, and the small purse and colored handkerchief also added an important note of

accent.

The following set of questions, designed to guide judgment and decision, were used as a standard for each costume exhibited;

Is the costume beautiful as a unit in itself? Is the color beautiful?

Has it balance, rhythm, proper distribution, and proportion? Is the color suitable to its purpose? Is the color becoming to the person who is to wear it?

Is the line correct for the material used and the person who is to wear the garment? Are the parts of the costume harmonious (hats, shoes, gloves, and purse)?

Are the different parts of the costume in good proportion--that is, is there a pleasing relationship among the various parts, such as, the pockets and the coat, the cuffs and the sleeve; the bodice and the skirt, etc. Do the various parts bear proper relationship to the individual; for example, does the hat seem to be correct for the size of the head and face? Is the size of the purse suited to the size of the individual?

Does the costume and the ensemble induce

a sense of rest? If so, how is it achieved? Look for the various ways that balance is achieved. Is it by line, by form, by color, or by a combination of two or more of these? Which type of balance is used--symmetrical or occult?

Is the eye carried easily from one part of the garment or ensemble to another? If so, is the result achieved by the use of repeated color, by value arrangements, by lines, or by a combination of two or more of these elements? Is there one center of interest? How is it achieved? Is it correctly placed?

After many costumes were observed, discussed, and judged by the preceding method, some simple criteria were evolved as aids in planning a wardrobe.

K. Planning a Wardrobe. A wardrobe should consist of garments appropriate to the activities of the wearer.

The school or business girl will need to concentrate on smart street, campus, and rainy day clothes, with one or two afternoon and evening dresses, and their accessories. The best selection would be of garments conservative in

cut, of dark or medium value, appropriate fabric, and simply trimmed. It may be well to repeat that fabrics suitable to street, business, or school are firm materials, such as silk crepe, rough pebbled silk, and many woolen materials. Dark gingham and heavy wash fabrics are also suitable.

The appropriate things for the time and place can be generally decided upon, but age and individual requirements differ. Appropriateness to time and occasion, then, may be indicated thus:

1. Street clothes, (that is, tailored, conservative) for street, school, and office.
2. Spectator sports clothes for games.
3. Active sports clothes when the wearer is taking part in sports and games.
4. Informal clothes for afternoon teas or parties.
5. Formal clothes for formal parties and dances.

Dressing appropriately as to type and age, indicates that the principles of design must be faithfully adhered to; for example, selecting colors, materials, and lines, in harmony with the type of the individual. Generally speaking, young people may wear more intense colors

and less conservative designs in clothes than older people.

Street clothes include those appropriate for shopping, traveling, office wear, and school.

They should be of durable non-transparent materials, which do not wrinkle or soil easily, such as gingham, rayon crepe, seer-sucker and some woolens.

They should be conservative in color and design.

Accessories should be of the substantial type, i. e., hat of felt or straw, which will not spot easily; shoes with sturdy soles, low or medium heels, and inconspicuous design; gloves should be of service weight in plain design and washable. The hose should also be of service weight close in color value to the dress, preferably a little lighter.

Street clothes may be used for spectator sports; or, if separate outfits are available, the latter may be more gay in color. The principles of selection of spectator sports are similar to those employed in the choice of street clothes.

The party dress, which is worn much less frequently, may be of more delicate material may admit of a wider choice of color (gay or pastel tones), and may be of more elaborate design than a street dress. Accessories in harmony with the main design should be chosen, and here, as in every type of costume, the dress must be adapted to the individuality of the wearer.

The costume and the entire wardrobe should have unity, that is, should appear as one plan or picture. The several means of achieving oneness are by the use of color, line, form, and texture, each of which is here briefly explained.

The first step in the procedure to achieve unity is to decide on a key or basic color, which should be one of the staple colors, such as black, brown, navy blue, white or gray. These colors, then may be combined with a favorite (but harmonious) color to vary the wardrobe; for example, brown combines with yellow, orange, beige, tan, cream, and certain shades of green, rose and blue; navy blue combines with lighter blues, red, beige, gray, yellow, white, cream, blue-green, and blue-violet. The neutrals,

black, white, and gray, combine pleasingly with any of the colors. The dominant color echoed several times in a single costume aids in bringing about the desired unity.

By the use of a simple type of line, the use of one type of line more often than other types, and the observance of consistency of line, unity is effected.

Form, a third factor in the achievement of unity, must not be ignored. Materials having surface patterns must receive more skilful treatment than those having mingled or plain forms, if unity is to be maintained.

Repetition of similar textures in costume and accessories tends to bring about unity.

The final activity in the planning of a wardrobe is here described: After the observation and discussion of the sketches exhibited, each pupil made a list of various articles of dress and accessories which she had in her personal wardrobe. A basic color was then chosen, and names of articles not in harmony with the key color were crossed out. A list was made of articles which she would need to complete the costume harmoniously (as to color, line, texture,

etc.) and appropriately (as to occasion of wearing and as to her individual type).

Pupils with sufficient talent to do so, expressed their original designs in drawing and painting; those of more limited ability, illustrated their plans with pictures cut from current fashion magazines.

L. Culminating Activities. As a natural expression of the ideas gained during the working out of the unit, certain culminating activities developed. An assembly program was planned and executed. The activities are here presented in descriptive outline.

I. The Activities of the Plan

A. A chairman was elected.

B. Three groups were formed.

1. One group made creative designs, on large poster board, of costumes for various types of persons.

A brief explanation of the basic art principles, as applied to costume, was written and presented by a student designer.

2. A second group planned how each pupil should dress to show appropriate selection of costume for various occasions.
3. A third group assembled costumes and accessories in combinations showing proper and improper selection from the standpoints of color, proportion, type, occasion, etc.

- C. An announcer was elected. The announcer prepared appropriate opening and closing remarks.
- D. A stage and property manager was appointed by the chairman.
- E. Rehearsals were planned and tried out.
- F. General discussion relative to its strong and weak points followed each rehearsal, and alterations were made for improvement.

II. Activities of the Program

- A. Brief introductory remarks were made by the general chairman, outlining the general plan of the unit, Art in Dress, and explaining the program to follow.
- B. Eight large creative dress designs were arranged on easels across the stage. When the curtain rose, these were exhibited with a student designer standing beside each picture. Each girl explained her design giving a brief resume of the principles which had guided her in its creation.
- C. The second group demonstrated the pleasing effect of appropriate selection of costumes for various occasions. Each girl, in turn, stepped up on an elevated platform in front of a large silver screen, posed in the spotlight, turned slowly to provide opportunity for the audience to observe the good points of the costume, then stepped down on the other side of the platform. As each costume was presented the announcer called attention to its most effective

aspects in a few brief remarks; for example, "The tailored dress is suitable for school, street, or office wear. The material is sheer wool, etc." The fact that the costume was selected according to definite and esthetic standards was clearly apparent.

- D. The third group was composed of eight girls, who appeared on the stage in pairs--one girl wearing a well appointed costume, with appropriate accessories, correct lines, proper material, etc; the other wearing a costume and accessories which violated every standard of propriety and good taste.

The contrast afforded much amusement and served to emphasize the principles of selection which the pupils had learned and carried out.

The announcer discussed each pair of costumes briefly pointing out their respective good and bad points.

- E. The program was concluded with the entire cast arranged on the stage in effective formation, while the announcer read a poem on the secret of being well dressed. The poem was written by one of the girls for the occasion.

M. Evaluation. After the completion of the unit, Art in Dress, tests were given to check the progress of the group in ability to select, and in some cases to create, appropriate and satisfying costumes. Subjective tests were also made by the teacher as follows:

The teacher talked to several of the parents

in order to obtain outside opinion on the improvement in personal selection of clothing after the study. Indications were that some improvement was evident.

The teacher observed each pupil carefully during the study and afterwards to note any changes in selection, color combinations, suitability and proportion in choice of accessories, such as bows for the hair, beads, purses, etc., which could be altered more quickly than the general wardrobe. Some changes for the better were evident here.

Added interest was seen in the enjoyment of art work, in creative problems, and in the use of color.

1. Tests. Other tests were given as outlined below:

TEST I

Discrimination

Numbered illustrations of good and bad costume designs were given to all students. An accompanying sheet, bearing the following points for consideration, was provided:

1. Is the costume good or bad in design? Give reasons for your answer.

2. If the design is good, locate and name outstanding and subordinate principles that make it so.
3. For what type of person is the design suitable in line and color?
4. For what type of occasion is it suitable?
5. If the design is bad, explain how the structural and decorative effect of the dress is influenced by it.

Answers to the questions were written out by each pupil, and the illustrations checked to indicate her judgment.

TEST II

Discrimination

Numbered illustrations of dress accessories were given to each student, with instructions to match each illustration, in turn, with a phrase describing the type of costume and the occasion for which it was appropriate.

TEST III

Appropriateness

As a effective means of measuring the progress of the student the tests

on appropriateness given at the beginning of the study for diagnostic purposes, were repeated at the close. The results were carefully checked and tabulated by the teacher.

Twenty-eight pupils took the tests. In the first test, having a possible score of 100 points, only two pupils scored 100. The lowest score was 20, with 18 below the median.

In the second test, the entire class tested above the median score. Six pupils scored 100, and the lowest score (made by eight of the twenty eight taking the test) was 80 points.

TEST IV

Completion Test on Color Quantities

TEST V

True-False Test on Color Harmony

TEST VI

Matching Test on Texture Harmony

The last three were brief tests and, for convenience, were checked and their results tabulated as a single test with a possible score of 50 points.

Of the twenty-eight pupils taking the tests at the outset, the highest score (made by only two of the pupils) was 48; fifteen pupils fell below the median, (39) and the lowest score (made by one pupil) was 23 points.

The same three tests, when repeated at the close of the study, showed only one pupil (with a score of 38 points) below the median (47), five pupils with a score of 50 points, and the entire group in the upper quartile.

Selected Group Test I

- A. To the group of superior pupils (those having artistic talent) the following instructions were given:
1. Draw and color a lay figure of more than average weight, and of the warm color type.
 2. Draw and color a lay figure of average size and weight and of intermediate type.
 3. Draw and color a lay figure of slight build, and of cool color type.
- B. Design three dresses for each of the figures suitable to the type represented—an afternoon dress, a street dress, and a sports dress. Color the costumes.

- C. Make a chart for each of the types of individual; list appropriate materials; list becoming colors; list materials and colors appropriate to the style of dress; list accessories appropriate to each costume.

Not the least gratifying of the outcomes of the study was the evidence of growth among all the pupils in appreciation of the esthetic. A keener sense of rightness was evident, not only in the personal wardrobe, but in the changed attitudes and understandings of the pupils. Finally, the study justified itself in the extreme enjoyment it afforded every member of the group.

V

EVALUATION OF THE UNIT
FROM THE STANDPOINT OF THE TEACHER

CHAPTER V

EVALUATION OF THE UNIT FROM THE STANDPOINT OF THE TEACHER

The practical value of the unit, Art in Dress, as carried out is perhaps best demonstrated by the changed attitudes of the students relative to their own personal wardrobes.

The writer, on the alert for evidences of improvement, noted the significance of such remarks as, "I know I should not be wearing this clip with this dress"; or "This type of dress is not correct for school, but mother says I must wear it out"; or "Doesn't Marjorie look well in her new tailored suit, Miss ___?" or "Mary's new blue dress is just the color of her eyes"; "How much smaller Jane looks in her dark dress!"

Comments such as these are unmistakable evidence that the study just completed has done something tangible for the student--that it is functioning in her every day life. Furthermore, it is a source of gratification to the teacher that many of her plans and purposes have been realized.

The committee plan used in the working out of the unit proved to be of considerable value, not only in the success of the unit, but to the individual student. The pupil working in a small group is afforded opportunity to initiate and to execute her own ideas, and that she availed herself of the opportunity in this instance is evidenced by many of the outcomes.

The group concentrating on dress fabrics conceived the idea of making the filing cards described in Chapter IV. The card was planned by the group in response to the need for a method of exhibiting the materials which they collected. The idea was presented and the cards made during the class period. Activities carried on outside the class period consisted mainly of gathering materials for demonstration, and of independent reading relative to the subject of materials.

The social phase of the committee plan is worthy of mention. Each committee, as its findings were brought in, did team work with members of other committees in preparing them for presentation. Certain members, for example, assisted in demonstrations. Some helped arrange and put up materials for the bulletin board; others,

chosen for their talent in lettering, acted as scribes for the charts and in the making of summaries.

The talented group made silhouettes of modern costume (1900 to the present time) and asked for the privilege of blueprinting them so that each member of the class might have a set for her note book.

This activity involved instruction and guidance on the part of the teacher, and considerable reading on the part of the pupil, in the art of blueprint making. Thus the pursuance of the study of one phase of art often leads naturally and easily to interest in an entirely different form.

Leadership and cooperation were developed among the students in planning for and putting on the program. Various phases of the work were chosen by the students best adapted to their execution, and all worked together in harmony, each showing a willingness to share and assume responsibilities. The presentation of the program provided an audience situation, and gave the student opportunity to develop the poise, good posture, correct speech, and clear enunciation essential to the success of such under-

taking.

Attitudes of respect for individuality and individual taste in style, methods, color, design, and form were fostered, as were also attitudes of inquiry relative to materials, colors, and technique.

Ability to concentrate on a given problem was shown in the work of the individual and in the small groups. Habits of orderly procedure in research, production, and evaluation were developed in the working out of the problem. Habits of discrimination were formed in the selection and classification of materials, colors, lines, and shapes.

One of the most interesting, as well as the most important, of the outcomes of the study was the integration of the subject of Art in Dress with that of other forms of art, and with other subjects of the curriculum.

The study of period costume gave the pupil a clearer understanding of the close association of the affairs and customs of a period with the dress of the period, thus integrating the latter in a very definite way with history.

It is interesting to note that time has given the world no great school of sculpture during a period characterized by styles in dress that hamper the free movement and grace of the human body.

Exercises described in Chapter III show the relationship existing between science and the study of color. Sir Isaac Newton and Hermann von Helmholtz, working in different periods, have done much to establish the theory of color as we have it today.

Art in dress bears a definite relation to music. Long, rhythmic pleats are comparable to the stately rhythm of martial music; the curved lines of soft drapery suggest the flowing rhythm of the Liebestraum. Certain individual qualities in art closely parallel individual qualities in music as shown in Chapter IV.

Form, line, and proportion in art are closely identified with the same elements in mathematics.

A backward view of the entire unit reveals to the open mind of the teacher not only its numerous desirable outcomes, as herein listed, but some of the negative results, as well--some

of the "might-have-beens" of ignored opportunity.

The subject of Art in Dress affords limitless possibilities in the field of vocational guidance. The need in industry for the designer becomes keener every year, and there is always a place for the designer, the copywriter, and the layout artist in the field of commercial advertising.

The illustrator is in demand to provide drawings and portraits for the covers of magazines, and for stories and articles.

The radio broadcaster of styles in women's dress must have a very complete knowledge of the characteristics of design in dress, and of the elements and principles of color, form, line, etc., as applied to art in costume.

More research might have been carried on in subjects closely related to the interests of the high school girl--for example, the history of the compact, the sweater, the hand bag, the lipstick, and other accessories regarded by the modern girl as essentials to proper dress.

Further tests for self-evaluation might have been provided; for example, a score card, designed to check the progress of the individual in selection of the correct materials, colors,

designs, and accessories for her personal wardrobe. The card might have been arranged to show Items of Apparel, as dress, shoes, coat, hat, gloves, etc.; Occasion (on which articles might be worn) as material, color, and design appropriate to the occasion; and Comments (space provided for improvements or violations noted). At indeterminate intervals each girl would check her own (or possibly a class mate would check for her) apparel worn on the day the check was made.

Progress might have been recorded on the card, or a graph might have been constructed to show it more clearly.

Other tests might have been devised for checking progress made in choice of proper color, line, form, etc.

The outline and activities of the unit as herein described are not to be regarded as arbitrary, but as having a flexibility that admits of adaptation to any group of girls at the age and grade level chosen.

Books

- Barnes, Emily A. and Young, Bess M; Children and Architecture, A Unit of Work, Teachers College, Columbia University, New York, 1932.
- Briggs, Thomas H., Secondary Education, The Macmillan Company, New York, 1933.
- Bruner, Herbert B., Compton's Pictured Teaching Units, F. E. Compton and Company, Chicago, 1933, No. 1, 2, 3, 4.
- Caswell, Hollis L., and Campbell, Doak S., Curriculum Development, American Book Company, New York, 1935.
- Cleland, T. M. A Practical Description of the Munsell Color System, Munsell Publishing Company, Philadelphia, 1929.
- Clouser, L. W., Robinson, W. J., and Neely, Diana L., Educative Experiences Through Activity Units, Lyons and Carnahan, New York, 1932.
- Charters, W. W., Curriculum Construction, The Macmillan Company, New York, 1929.
- Cox, Philip W. L., Curriculum Adjustment in the Secondary School, J. B. Lippincott Company, 1925.
- D'Amico, Victor Edmond, Creative Teaching in Art, International Textbook Company, Scranton, Pennsylvania, 1942.
- Dewey, John, Art as Experience, Milton Balch and Company, New York, 1934.
- Dewey, John, Barnes, Albert C. and others, Art and Education, The Barnes Foundation Press, Merion, Pennsylvania, 1929.
- Faulkner, Ray Nelson, Ziegfeld, Edwin, and Hill, Gerald, Art Today, H. Holt and Company, New York, 1941.

Gardner, Helen, Understanding the Arts, Harcourt Brace and Company, New York, 1932.

Goldstein, Harriet, and Vetta, Art in Every Day Life, The Macmillan Company, New York, 1925.

Harap, Henry, The Technique of Curriculum Making, The Macmillan Company, New York, 1929.

MacDonald, Rosabell, Art is Education, H. Holt and Company, New York, 1941.

McAdory, Margaret, The Construction and Validation of an Art Test, Teachers College, Columbia University, New York, 1929.

Meier, Norman Charles, Art In Human Affairs, McGraw, Hill Book Company, New York, 1942.

Mursell, James L., Some Generalizations Concerning Art Education, An Annual, "Art Education Today", Bureau of Publication, Teachers' College, Columbia University, New York, 1937.

Risk, Thomas M., Principles and Practices of Teaching in the Secondary Schools, The American Book Company, New York, 1941.

Sweeney, Frances G., Barry, Emily F., and Schoelkopf, Alice E., Western Youth Meets Eastern Culture, Bureau of Publications, Teachers' College, Columbia University, New York, 1932.

Tannahill, Sallie B., Fine Arts For Public School Administrators, Bureau of Publications, Teachers' College, Columbia University, 1932.

Winslow, Leon Loyal, Art in Secondary Education, McGraw-Hill Book Company, New York, 1941.

Works of Educational Groups

National Commission on Cooperative Curriculum Planning; The Subject Fields in General Education, D. Appleton-Century Company, New York, 1941.

National Society for the Study of Education;

Art in American Life and Education, 40th Yearbook, Public School Publishing Company, Bloomington, Illinois, 1941.

The Commission on the Secondary School Curriculum, an annual publication of the Progressive Education Association; The Function of Art in General Education, D. Appleton-Century Company, New York, 1940.

Report of the Committee on Proposed Bulletin of Units of Work, Thomas Hopkins, Chairman; Society for Curriculum Study, News Bulletin, No. 2 (April 1, 1933).

An Annual Devoted to the Problem of Art Education, Edited by the Fine Arts Staff, Teachers' College, Columbia University, New York, 1935, 1936, 1937, 1941.