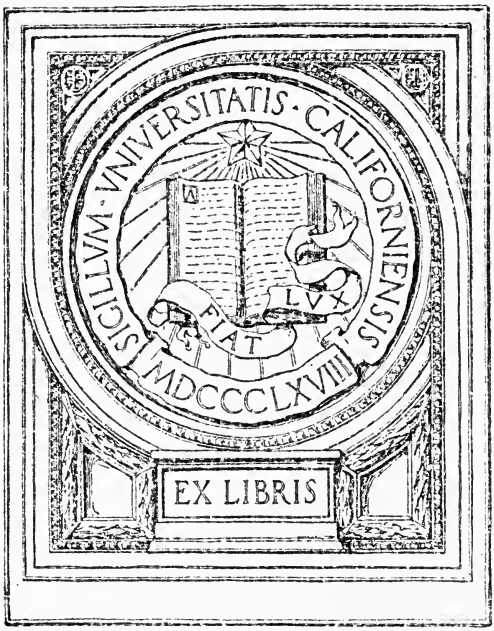
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DOMESTIC ART

IN

WOMAN'S EDUCATION

FOR THE USE OF THOSE
STUDYING THE METHOD OF TEACHING DOMESTIC ART AND
ITS PLACE IN THE SCHOOL CURRICULUM

BY

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NEW YORK
CHARLES SCRIBNER'S SONS

1912

TO MY GRANDMOTHER

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PREFACE

THE permanency of Domestic Art as a feature in the education of woman is assured. It is so vital an expression of her nature that any curriculum which does not include training for the home sphere ignores the very centre about which her life revolves. Many of the home talents are innate and develop naturally, but many lie dormant because untrained. When woman begins to preside over her own home, she soon discovers her limitation if she has not had the advantages of training along the lines of household arts and economics. This book is not an argument for the introduction of Domestic Art, for that is unnecessary, but it is hoped that it may be of value to those who do not see its relationship to other elementary school subjects nor the place it may occupy in high schools, colleges, or trade schools.

Domestic Art has suffered because many have tried to teach it who were not fully prepared to do so, and who have failed to see the vital relationships and the thought content involved. The subject has

been so poorly presented in some places that it has naturally lost favor, but this is not because it lacks content. It is hoped that this little book may be of assistance to those who, knowing the practical technique of Domestic Art, may seek for more light on methods of presentation of subjects and planning of courses of study in various types of schools. It is also hoped that it may offer suggestion of the content which is involved in the study of Domestic Art.

The author wishes to express her thanks to the students in her classes who have kindly permitted the use of some of their class plans, illustrative of courses of study suggested for different kinds of schools, and to her friend and teacher, Mary Schenck Woolman, for her enthusiasm and inspiration which prompted this work.

ANNA M. COOLEY.

January, 1911.

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DOMESTIC ART
IN
WOMAN'S EDUCATION

PART I

SOME PROBLEMS CONFRONTING THOSE INTERESTED IN TEACHING DOMESTIC ART

CHAPTER I

THE FIELD OF DOMESTIC ART

THE term domestic art as applied to part of woman's education has been in use for about twenty years. During the past five or six years a confusion of terminology has arisen, and throughout the West the term domestic science is used to designate all the arts centring about the home. In another section of our country, especially the Middle West, household arts is used synonymously with domestic science, so that naturally one often hears the questions, "What is domestic art?" "What is domestic science or domestic economy?"

Confusion of terminology.

and "What is meant by household arts?" The last title is probably the one which should be made the general term to include all the arts and sciences which centre about home-making. This seems large enough to include all of the following subjects, which may be classified thus:

Domestic Science.	Physics and chemistry. Physiology and hygiene. Chemistry of foods and dietetics. Cooking and serving of meals. Bacteriology and biology. Laundering. Economics and sociology. History of foods, preparation, and manufacture.
Household Management.	Home nursing and invalid cookery. Keeping household accounts, of food, shelter, and clothing, etc. Domestic service. Household sanitation and decoration. Institutional and home shopping. Repairing and renovating. History of home, sociology, economics, and business law.

Domestic Art.

- Art, especially design in relation to the home, its furnishings, and dress.
- Sewing, dressmaking, millinery, embroidery, crocheting, and knitting.
- Study of textiles, their history, manufacture, and properties in relation to use.
- Repairing and care of clothing.
- Physiology and hygiene of clothing.
- History of architecture and dress.
- Economics and sociology.

This broad outline is perhaps suggestive of what the work of this field of household arts may mean.

Woman's household not generally well organized.

It is all woman's realm, and there is no reason why woman should not run her household on scientific and artistic principles. In the business world one finds that man is ever ready to try and adopt any new method of keeping books, filing, or cataloguing, and is constantly on the lookout for new developments of science which will send him ahead of his competitors. He would not expect success without system, organization, knowledge, and principles upon which to base his planning. If woman is to be trained to run her

household scientifically and artistically, to know the meaning of the true home-life, and the study of family and the child, teachers must certainly be well trained to introduce this subject into the school curriculum, so that when the mothers of the coming generations rear their children it will be on a foundation which will tend toward their development into truly good citizens—physically and morally strong.

The subject-matter included under any one of these heads involves so many subjects that it is not the attempt of this book to describe them all—rather, attention will be centred (for discussion of subject-matter) about the field of domestic art, as one phase of the household arts, although the suggestions for methods of teaching, planning of courses of study, relation to general education, may be as truly applicable to the fields of domestic science and household management.

Common use of domestic art narrow.

One generally hears the term "domestic art" in use in relation to sewing in either the elementary or high school. This is a very narrow usage of the term when one considers all the subjects above outlined and the underlying ideals and content which such subjects imply. The ethical, social, and æsthetic values are often lost

sight of and the material or utilitarian side made the main issue. Not but that this should be strongly emphasized, but the field may be so much broader and the results so much more satisfactory, in relation to both work and child, if teachers are trained with a view to including the cultural and educational foundations of this great field of work.

Closer analysis of domestic art subject-matter.

A closer analysis of subject-matter may be advisable before discussing the relation of this field of work to general education, or to trade and industrial life:

1. *Hand Sewing.*—The direct application of stitches to articles of interest to the pupils.

2. *Machine Sewing.*—The use of foot-power and electric-power machines, the latter especially in schools of trade type, in garment-making, dressmaking, and other articles.

3. *Drafting of Patterns.*—Some form of simple rule drafting or system drafting, pattern modelling, and use of bought patterns.

4. *Millinery.*—The making, designing, and trimming of hats of various styles for all seasons.

5. *Embroidery.*—The use of stitches in decoration of garments, household articles or other furnishings.

6. *Crocheting and Knitting.*—The making of simple articles—forming foundation for more advanced work.

7. *Repairing and Care of Clothing.*—Patching, darning, remaking; economy in relation to planning for one's wardrobe—or for family wardrobe; adaptation of garment to use.

8. *Textiles.*—This may include the study of the textile arts of weaving, netting; properties of textiles in relation to use; history of the evolution and manufacture of textile industries; dyeing and cleansing; study of widths, prices, and qualities of materials, as well as adaptation to use.

9. *Hygiene* in relation to dress and furnishings.

10. *Art* in relation to design and color for use in the home and for dress; arrangement of interiors of houses; suitability of line and color in relation to dress; study of general principles of design.

11. *Woman's Relation to the Social Field.*—Discussion of sweatshop labor; leagues for social betterment, as Consumers' and Municipal League; bargains; ethics of shopping; development of social consciousness; training in accuracy, neatness, foresight, and responsibility.

12. *History.*—Industrial history; history of architecture; history of costume; development of household art, and history of handicraft.

13. *Economics and Simple Business Law.*—Economics of the home, relation of expenditure to income. Household management, especially in relation to purchase and care of clothing and furnishings.

Household arts, of which this domestic art is a part, has been happily defined as, "a comprehensive term which includes the scientific study of all matters and means which will contribute to the happiest, healthiest, and most efficient family life."

Reference for Study

"History of Home Economics Movement," Bevier and Usher.

CHAPTER II

THE RELATION OF DOMESTIC ART TO EDUCATION

In order to see the relation of industrial work to education, it is necessary for us to consider, in a few statements, the meaning of education as it is now generally accepted. The following words seem to sum up the situation: "The education of the individual is the process of adjustment to or participation in the world of social relationships and in the fund of social experience, the ideals and methods which those relationships conserve." We have, therefore, the little child in our midst, the little child who is to be brought to a realization of his own self and place in the world and to see his relation to the progress of events. All the culture of the race is his "spiritual possession" and the unknown land through which he is to be guided, in order that he may become an efficient individual.

Industrial work a vital part of education.

There are two points for us to keep before us, in considering the relation of industrial work to education:

1. How can it help to interpret the child's social relationship?

2. Can industrial work help him to trace the progress of events which have led to present civilization and help him to become intellectually, emotionally, and volitionally adjusted?

People have been slow to realize that hand-work has been a potent factor in the spiritual and mental development of nations. There is a longing in every soul for expression. There are many useless people in the world to-day because of lack of training in the industrial arts. The individual must be given a chance to express and the mind allowed to react to the ideas and impressions received, in order that through use there may be the necessary brain development and adjustment to new conditions.

Hand-work as old as man.

From time immemorial man has worked with his hands, and his time and attention have been utilized in the production of things both useful and ornamental. "Necessity" very often was the "mother of invention," and the need for food, shelter, and clothing led to the gradual de-

velopment of industries, from the simple hand-work to the elaborate products of the factory system of to-day.

Whether, then, through necessity or simply because of joy in expression through the hands, the world is to-day a rich treasure-house stored with the wonderful products which man has created. The instinct for production is not dead, but will last as long as man, for to create is a divine and God-given instinct.

Froebel, in his study of the child, realized that his natural activity could be utilized and turned into channels which would lead to his gradual physical, moral, and intellectual development. He believed this should be of the head, heart, and hand. For that purpose he introduced the gifts, occupations, songs, and plays, and allowed the child to invent and create. Joy and happiness in work were the results.

Froebel realized the value of hand-work.

For some time kindergarten training was a precarious feature in education, but now that this branch has been incorporated in the public school systems and colleges, and finds a place even in university work, it seems an assured fact that children are to receive some of their early training in the kindergarten. Here their crude ideas are worked out through the materials

offered, and the child improves in his ability to express himself with his hands—for expression is necessary if images are to be clear. This hand-work satisfies the early craving of the child for play and the practical, and the gifts and occupations become playthings in his hands, but, unknown to him, things of educational value.

When the child leaves the kindergarten and passes to the grade school, too often the change is a very abrupt one. There is a lack of the old-time freedom, and an absence of the play materials. Children then begin to lose interest, and the attention is often forced rather than spontaneous, and teaching ceases to be as effective.

The introduction of hand-work into schools.

As a help in alleviating this difficulty, hand-work, as one of the mediums of expression, has been introduced into many of the grade schools, sometimes in correlation with other subjects, but more often simply in an occupational way. Hand-work as manual training is most effective when taught in relation to the other work of the grade, so that there is unity and a harmonious development. By manual training is meant not simply work which is spontaneously interesting and keeps the child alert and active, but work which is

educationally effective. This effectiveness is in the hands of the teacher, and will be worked out by her if she understands the theory back of *real* manual training and the true relationship to industrial life.

It is not that hand-work is to be introduced as a study which is a unity in itself, but with other studies which go to make up the curriculum, so that it may help to vitalize the rest and bring the child directly in contact with the world and the reality of things. The constructive activities may be made the centre of all studies and radiate into all life, beginning primarily with the home, which is nearest akin to the life and interests of the young child. Through the different lines of hand-work the child becomes acquainted with the materials and processes which have made social life what it is, because it has contributed to culture a share of the scientific, literary, æsthetic, institutional, and religious inheritance of the child.

Hand-work formerly a part of household work.

In tracing the elements in the curricula of various ages, one notices that they are the result of the dominant social tendencies. The seventeenth century saw a change in the character of society, and the introduction of the vernacular and the realistic subjects into education. The eighteenth and nineteenth centuries were characterized

by the prominence of the scientific element. The twentieth century is particularly the era of economic advancement, and we may hope to see the industrial element becoming more and more a feature of modern education. This revolution in economic changes has caused a shifting of population and brought about changes in habits of living. People living a nomadic life are, in their family group, economically sufficient unto themselves. When society developed and people grouped themselves in towns and villages the neighborhood produced nearly all that was necessary for life. The industrial occupations were centred especially in the home, where all the processes of development were seen and participated in, from the raising of the wool and flax to the spinning, dyeing, and weaving of the cloth, and the production of all the necessities of life. This work was participated in by all the members of the household.

Since the industrial revolution and the rapid expansion of the factory system the elements in the curriculum have not kept pace accordingly. While this change brings so much that is good, it also almost eliminates much that was of value in the old neighborhood system. Should not our modern curriculum respond and, if possible, try to make

amends to the child for the lack of some of the old-time family training, where the child was taught to do in the home, and to be responsible, and to feel that he had an economic share in production?

Should not the training which is given the children in the upper grades be planned to prepare them for a society which is industrial, as ninety-five per cent do not pass into higher schools? Is not hand-work for the little people if directly connected, first with home interests and then with the evolution of the social industrial interests, a step in the right direction, keeping in mind what the future development must be? Can we not, through making these constructive activities a part of our curriculum, acquaint the child with the things which make for true culture and liberal education, as well as give him an introduction to industrial life? Let us teach him the wisdom of foresight which is so essential to success, to be a responsible being with obligations toward his fellowmen; let us acquaint him with their needs and conditions, that his sympathies may become broadened and a deeper reverence for man and God may result. If acquaintance with industrial work can help to contribute some of these

Direct bearing of industrial work on training for life.

things, it is surely a vital part of education, in fact, the very core of a liberal education.

There is, however, often danger of the teacher of constructive work overestimating the importance of her line of activity. There must be balance in all things, and the industrial work, or later domestic art as a part of industrial work, should conform to the other studies and the relative amount of time be allowed for it. Household arts, of which domestic art is one phase, stand out pre-eminently in the field of industrial work as a part of education for woman. There are so many reasons why this is true. The girl becomes interested in life because she is dealing with things pertaining to every-day life; she sees connections, if the teacher will aid, in the study of history, geography, arithmetic, etc., and this unity helps in memory. She begins to feel useful because she can do or make things for others, and here begins the development of social consciousness which is so important a factor in the development of a truly educated person. This study leads a girl to see her ability along certain lines of work, and often ultimately, among certain classes, to a

Danger of overestimating place of hand-work.

Domestic art of value to the girl in every-day life.

selection of desirable work for life. A connection is made between life and technical work If properly taught, domestic art should have a highly moral effect. It makes for perfect sanity and mental health, it develops the will and power of inhibition which is the root of self-control in morals; it makes for firmness and force of character. A product which is correctly and neatly finished certainly fosters this. It must be clean, simple, accurate—this accuracy, of course, after a child has passed the age of about nine years.

Girls learn to understand the value of a well-made article. This affects supply and demand, as woman is the greatest consumer, and will also affect the salary of the wage-earner. Good articles will be in demand. Domestic art also gives an understanding of materials, which will be of economic value in the home, and will also regulate the materials put upon the market. There is certainly created a greater respect for labor. While learning through this natural method of doing, the observation, judgment, and imagination of the girl are all receiving training. A vital connection is being made with the home, for this new interest finds expression there and opportunity for further cultivation. Girls value most highly

the ability to utilize things which they have, and are interested in making home comfortable and pleasant through decoration and the ability to do which this new art makes possible. There is an ever-increasing pleasure in correct color combinations and restful effects, and increased enjoyment of the beauties of nature. As the girl advances in the work she also learns how to plan her wardrobe economically, how to purchase wisely, and how to make her own clothes so that they will be adapted to her use and personality. This may lead her into trade work as a means of livelihood, for the opportunities are many which this field of domestic art affords. There is no stronger argument for this work than this, that it should make her a more truly capable woman, one sympathetically awake to the difficulties of others, able and ready to lend her trained hand, and responsible to bear her share of the burden of life.

References for Study

"The Child and the Curriculum," Dewey.
"Education of Man," Froebel.
"The Meaning of Education," Butler.
"School and Society," Dewey.
"The Place of Industries in Elementary Education," K. Dopp.

CHAPTER III

THE NECESSITY FOR STUDY OF THE PUPIL

ONE may be very familiar with the technique of domestic art and have intimate knowledge of the underlying thought content, may know how to present all of these thoughts, and yet fail as a teacher of domestic art because of lack of understanding of the different periods of childhood and girlhood. It is equally as important as technique of subject-matter to know the intricacies of working of the mind with which the teacher must deal and the effect various kinds of work may have on the pupil at different periods. A study of the many expressions of the self-activity of the child is a basis for planning the curriculum—either of general studies or of domestic art in relation to them.

Knowledge of child nature important.

"The Case is of Child. It is his present powers which are to assert themselves; his present capacities which are to be exercised; his present attitudes which are to be realized. But save as the teacher

knows, knows wisely and thoroughly the race experience which is embodied in that thing we call curriculum, the teacher knows neither what the present power, capacity, or attitude is, nor yet how it is to be asserted, exercised, and realized."

The problem before us in planning hand-work for children, is one which should centre directly in the child. We should begin with him and end with him in our consideration, and plan our work with his growth and development in view. The teacher must select the right stimuli for those impulses which are to be employed and must know the aim and direction of movement in planning—there must be a basis for action. The experience of the teacher therefore must interpret the mind of the child and lead on to some definite aim.

Work should bear directly on interests of the child.

It is not the accumulation of knowledge which we hope to heap upon him in our planning, or direct information in relation to concrete things, but to bring him to a realization of his relation to life. It has been said that "knowledge is not valuable, but knowledge as a function in life is indispensable."

The little child loves to do, to act, to express what he sees in a constructive way. He first learns to

construct through play in making believe. He loves to see results quickly and to make wholes rather than parts of things. At this period he cares more for the actual products than for the processes by which they are made. Both are necessary for complete education. He wishes to imitate all phases of adult activity, but as play, not as work. There are, though, occasional periods when the child likes to feel that he is working, even though it is in a play way, as helping mother to dust, clean, or sew. The real work attitude comes later in the child's life and must be kept in mind in planning courses in hand-work. But play as well as work is necessary in the development of mind and most of early development comes through play in games, etc. Aristotle and Plato would have us realize the value in play, and Froebel's philosophy is based upon the development of the child through his activity in play, games, and occupations. Later he must learn to work in order to become truly socialized and be taught to see that products of work have an economic value.

Love of expression and construction of the little child.

The child loves also to investigate, to explore—and this may later lead him to science. He understands things and the lives of those about him,

in so far as he realizes his ability to do and sees his relation to the lives of others. He finds himself in the midst of a complex world. Perhaps to him it may not appear so, for he is directly concerned with the concrete world which lies nearest to and just about him. His interests centre in the home, the people and animals there, the personal attachments and love and sympathy of those about him. Therefore the early activities in school in order to connect with the home and be vitalized should centre there also. He loves best the things which he understands best. The teacher must guard against the impulse in children to do things at random and must direct the impulse into paths where real value may be the result.

Love of exploration and investigation.

The child likes also to talk about his work; the mind must react and express itself if it has been impressed. The teacher of hand-work must utilize this instinct and help the children to see relation between the thought expressed in words and the act as constructed. A chance for additional expression is through the medium of pencil or crayon. Hand-work, then, should mean for the child interpretation

Avenues of expression for the young child.

of this social life through the mediums of form, color, and materials.

Because of the above natural instincts of little children, we must, in planning our work, utilize them to best advantage in order to make hand-work a vital part in education.

Owing to the reasons given above, the constructive work of the later kindergarten and first grade should be related to the child's home life. This will necessarily vary with locality and environment. The central thought of mother, family, household activities may be the starting-point for nearly all. If the children under consideration are those in a small village, the interests following the home would be those of village life, construction in relation to the farm and agricultural life, the village blacksmith, store, church, etc. By the time he reaches the second or third grade and his own surroundings have in a degree been interpreted, he may be introduced to the lives of other little children and primitive people and their methods of securing food, shelter, and clothing, which have come to him so easily. In later years, after comparisons have been drawn, he may be led from the knowledge of rural life to that of the

Early grade work to relate to home life.

industrial life of city, state, and national affairs, in order that he may understand something of their complexity and his relation to it. By the time the high school period is reached, the relation of trade and industry may be understood and the child have some knowledge of the relationships existing in them and of the obligation resting upon him to share in the activity.

If the locality of the city child is the starting-point in planning, the construction of things in relation to home interests may again be the centre, and the radiation from them into the field of interests nearest akin to the life of rich or poor child. The comparison of present life as the child knows it with that of more primitive people, the different stages of hunting, fishing, and agricultural development, in some localities must necessarily be postponed a little later than the second grade, until the children are ready for it. There can be no hard and fast rules in relation to the general course of study or particular relation of handwork to it.

Locality and environment affect the course of study.

The real spirit of work or construction as work does not begin until about the twelfth year of the child's life. Then the industrial work may be closely

related to the particular trade or industry of a locality. With the young children one must keep in mind the idea that finished products of fine technique are not the end and aim in view. It is the child's development first and foremost and one must expect rather crude results. Owing to the physical growth and peculiar nervous development of children, a large variety of materials for constructive work should be used, and only those which excite to broad action in which no details of perfection are required. In the use of these materials and processes there must be adjustment to the mental and physical capacities of the child.

Main aim with the young child is training. Results expected to be crude.

As Dr. Dewey says, the school should represent to the child the real life of society. It should be a miniature community because an individual can have no life apart from society and he can realize his aims best by making them accord with the desires of society in general. The work of education in the school, therefore, whether through hand-work or otherwise, is to help the child to see his relation to the whole. All the possessions of the race are to be bestowed upon the individual so that he may carry

them forward with the additional thought and progress of his times. Here, also, he is to glance ahead into the future and to learn to take his place among the men of real life. Here he must learn justice, order, and co-operation; he must develop independence of action which shall later become leadership.

Because the child is a social being and the school is to be made his little world, attention should be given to group work. Through it the child learns to work with others, to respect and adapt himself to various interests and natures and to work for a common good or whole. "The mere absorption of facts or truths is so expressly individual an affair, that it tends very naturally to selfishness. When children are engaged in active work, helping others, it sets free the powers of the one who gives and is an incentive to the one helped." While the individual parts mean much to each child as his contribution or help toward the whole, it is the whole result which is of value to the little community because of the co-operative spirit expended in bringing them together. This combination of interests has been happily called orchestration, and surely it reaches

Value of group work in development of the child.

that where the work is the expression of joy, and good will and sweet harmony are the result.

If, then, through group work and individual constructive work the child is made to feel that he is really a part of society in his little world, and is given an insight into the culture of the race possessions and industrial development and a foresight as he works with others, surely this work may be said to contribute its share in the vital education of the child.

The task before the teacher is one of great responsibility. We are to make this hand-work one means of developing the child in the fullest possible manner.

During the early grades, the child is not able to make the fine adjustments which are required for fine sewing—one expects crude results, but by the time the fifth grade is reached the teacher should demand more accurate work and greater neatness. Very often teachers neglect to do so and the result is that slovenly habits of action are formed.

Close contact between teacher and girl a factor in development.

It is during the period from eight to fourteen years of age that the teacher of domestic art has an unusual opportunity, because of her close contact with the girls, to help develop their social consciousness and is able to suggest opportunities of

thinking about and helping others in a practical way. It is during this period too that supplementary talks on clothing, hygiene, appropriateness of dress are of particular value—and make much impression. It is the period when the inner life of the girl is concealed from others and is so often fraught with many dangers. The teacher of domestic art has many responsibilities here, for comparatively few girls pass beyond the elementary school education, so that the time is limited in which much must be accomplished if the teacher would be of the greatest possible aid.

Physical change during the period of adolescence.

As the girl enters upon the age of adolescence, the teacher should understand this period of girlhood and not only adapt her work to it, but make the most of the expressions of this period of development. It is the time of abrupt bodily transitions, the girl is restless, is growing rapidly and needs plenty of rest, and exercise, proper food and clothing. The teacher of domestic art should be alive to these things, and the girl should not be overtaxed nervously nor the eyesight strained. It is often possible for the domestic-art teacher to discover defects of eyesight that may not have been noticed by any one else. Because of the

intimacy of relationship between teacher and pupils, the hopes, ambitions, needs of the girls are expressed to the teacher, so that opportunity is afforded to guide them perhaps in choosing their life work. Assistance may often be given which will affect the whole life trend of the girl, for this is the period of intense ambition for her own life, either in respect to marriage, self-support, or even socially in the school or community. It is the age of interest in manual training, when the development of the muscles gives strength for the control and use of tools. The most important service the domestic-art teacher can render during this period is to instruct the girls in the importance of proper clothing and food as the foundations of good health. This aspect of the work also emphasizes the principles of domestic science.

Mental changes.

During this adolescent period, the domestic-art teacher should be conscious of the mental changes of her pupils. She will be aware of a certain increase of vigor of mind and open-mindedness as it were. It is the time of the development of the reason and judgment and should not be hampered by too much memorizing. There is every opportunity for developing judgment in the domestic-art work—and the teacher may soon learn whether

the service is of the lips or based on individual grasp of the problem. Girls are often lazy and are content to accept subject-matter which is given to them without question, whereas a boy would wish to know "the why." Generally the girl is alert, bright, and interested in things—and the teacher should utilize this interest in organized activity. This is the period when girls are apt to worry over their problems and to have little patience with the minute, exact, methodical. It is also the period of certain emotional development, and consequently it often happens that the young teacher with a happy, spontaneous nature is more apt to be successful with girls of high school age than an older person perhaps better trained and more experienced in technique. This is the period of storm and stress, of excitements, ambitions, hopes—religious doubts and introspections, sex impulses, and the adoration of teachers and friends. All these impulses must be understood by the domestic-art teacher if she will deal wisely with the girls under her care. It is the period of great responsiveness to all stimuli whether right or wrong, the period of development of self-conceit and superior airs, and that welcomes new, radical, or even revolutionary thoughts. There can

be no more important field than this for the domestic-art teacher, and comparatively few teachers plan with foresight to make the lessons with the girls of this age really tell. It is the time when true impressions can be made and a responsibility and social conscience awakened that will have a lasting value. The close contact of the domestic-art teacher makes it possible for her to give instruction which will train for character and the development of intelligent and independent women who will be the backbone and safeguard of our nation.

There will probably be many discouragements for the teacher during this period. It will be necessary to have faith and to await results which may be long in appearing. Mr. Stanley Hall says that at this period the soul is so sensitized that nothing is lost. It is the period of insight and receptivity—and the harvest will surely come—the mental life is becoming organized and permanently fixed and there is a power of apprehension and appreciation which is far beyond the ability of the girl of this period to express.

It is a big problem and one of great responsibility for the teacher of domestic art to know when and where to help to strengthen, to direct or inhibit the various impulses of this critical period of womanhood.

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"The Educative Process," Bagley.
"Notes on Child Study," Thorndike.
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CHAPTER IV

PROBLEMS CONNECTED WITH THE PRESENTATION OF DOMESTIC-ART SUBJECTS

It has been said that teachers are born, not made. Not every one who understands the technical work of the field of domestic art is able to present it—even in some cases after much training. Nevertheless a conscientious study of the child or person to be taught and an intelligent understanding of the best methods of presentation of that subject-matter can but produce decidedly better results. As we have noted, the mass of subject-matter which we call domestic art is so very broad that it is not possible to present all the phases of it to the children in the elementary or high schools. Special discussions of curricula for various types of schools will follow, in other chapters, but it is the purpose of this to suggest the *best way to present* different phases of the domestic-art work and to leave the selection of subjects for later discussion. One must keep constantly in mind the person or child to be taught,

and the subject-matter and method should be that which will be of most value ethically, practically, and intellectually to the pupil.

The writer has visited many domestic-art classes and has found poorer presentation of the subjects than in almost any other field of work. Very often the teacher is not prepared and suggests to the class that they "go on with their work." This means that the teacher will often pass among her pupils and instruct individually, but gives no thought or time to class discussions, in which the uncertain things are made plain and a real thought content developed. Class discussion previous to beginning work is an economy of time. It enables the pupils to begin together and many of them to proceed without much help from the teacher. This is of much assistance if the class numbers forty or fifty, for then it is a physical impossibility for the teacher to direct each worker. When it so happens that the pupils are working on undergarments or dresses, individual instruction is necessary and the classes are usually smaller, but even then there should be supplementary talks, or questions in connection with the work, of vital importance to all and that will give the work a real thought content.

Individual versus class instruction.

No teacher of domestic art, or any subject in fact, should approach her class without some definite plan of action in mind. Much time is wasted in this field of teaching because of lack of clearly defined ideas on the part of the teacher, and lessons are conducted in a haphazard way which could have been brought to the point had time been given to thoughtful preparation. A special chapter will be devoted to the subject of lesson planning and the thought involved in correct presentation of this subject.

The teacher's preparation.

Every detail of preparation in the way of materials for illustration should be arranged before the hour for the lesson arrives. The failure to have at hand a demonstration model or tools may often mar the effect of an otherwise good lesson.

There are many children who see things with their eyes only and to whom a spoken word in relation to direction means very little. For such the actual demonstration on the frame or cloth is of greatest value. It is not necessary to have a regular store frame—a piece of unbleached muslin attached to the blackboard frame with thumb tacks will answer every purpose. A large darning needle and red or black Germantown

Illustration of lessons.

yarn complete the outfit. The stitches should be large enough for all to see without difficulty. The blackboard is also a valuable adjunct and should supplement the demonstration frame. The teacher of domestic art should be ready to illustrate as she talks and to represent the stitches with needle in position if it is a sewing lesson, or to outline the points made in discussion of other subjects. Lessons may also be illustrated by pictures, when talks on textile and household art subjects are given, and by collections of other exhibits when materials, etc., may have been discussed. Trips to museums supplement these as another avenue of illustration. It is always well to have illustrations of completed articles in which the stitch or lesson to be taught is plainly emphasized so that additional application for use may be really seen as well as discussed in class. Every complete domestic-art laboratory should have some cases for illustrations, not only of completed articles that have been made in class, but for studies of ethnological subjects in connection with the field of domestic art. Basketry, pottery, weaving, primitive spindles and looms, laces, embroideries, study of historic costume, all help to illustrate the talks and interest the pupils in this field of work. An

industrial exhibit is also of great value, showing the processes of thread-making, needles, buttons, and preparation of all the raw textile fibres. Some of these may be obtained from the United States Government, and there are also certain textile manufacturers that are willing to furnish well-mounted boxes of specimens for a small consideration. Collections of materials, laces, muslins, etc., with their respective values, names, and prices, will also be found of great assistance.

The domestic-art teacher should be constantly on the lookout for pictures and clippings which will assist her in illustration. These may be mounted, filed, catalogued, and kept for reference, and are almost invaluable. The current magazines furnish much material. Inexpensive pictures are often found relating to subjects in this field and may be framed and hung in the laboratory if a special room is devoted to this work. The bulletin-board is of much value in this connection for clippings and pictures; mottoes and suggestions may be mounted temporarily there. This may all be in charge of the students from week to week, for change and filing.

The relation of the textile field to the elementary or high school curriculum will be shown later in

discussing courses of study, but certain hints for presentation may be given here. There are so many phases of this work that the opportunity is almost limitless. Weaving may be given on small looms as individual problems in the lower grades of the elementary school and is often begun in the kindergarten. Dyeing of materials may be done in this connection. In the fourth or fifth grades weaving may be given on individual looms and the results joined, forming a rug or textile of value in house-furnishing problems. Later in high school, or even before, opportunity may be given for co-operative problems on the colonial type of loom. Weaving is often "overdone," especially in the lower grades. As one line of industrial study it is of interest and value, but little children need variety of work and the subjects are so numerous and can with foresight be so grouped as to develop thought in relation to the various fields of industry that there is no excuse for confining the work to this one subject. The reason is apparently lack of willingness on the part of the teacher to exert herself or an absence of originality in her scheme of work. Charts will be found of much value in teaching textile work. These may represent

Suggestions for the presentation of textile work.

many phases of textile study and may be made by every child in the class and the discussions given as class lessons. Comparison of the four leading textiles makes an interesting study. Such charts may be used as early as the third grade, and supplementary talks make them of great value. These may show the four samples pasted on a card with the names written above each. Samples of yarn may be pasted below the cloth for comparison.

Children are interested in cutting out paper dolls from magazines. A picture of a girl or boy may be mounted on the chart or card, and lists of the four textiles in which she is presumably dressed written in the four corners of the card. Opposite each garment named may be pasted a sample. These will show the complete outfit of the child. The children should be free to select their samples from boxes of scraps arranged by the teacher in convenient places. Charts illustrating the problem of dress and its cost are also helpful. A teacher with ingenuity may insert any variety of these problems. The field is rich for showing the processes of modern manufacture, the properties, dyeing, cleansing, and shrinking of materials.

Books of textile samples will be found of much

help in either elementary or high school. The teacher may supply books for each textile and plan the classification. The samples, with widths and prices, may be mounted by the children as contributed.

In connection with history and geography the interest in textile work will be much increased by study and presentation by the children of informal lectures on the evolution of the various industries connected with clothing and shelter. If these are supplemented with a stereopticon, the interest of the little lecturers knows no bounds.

The use of drafting and patterns.

Of late years there has been much discussion in normal domestic-art circles as to the use of drafting in elementary and high schools. The simple drafting of shirtwaist, kimono, and small petticoat is often given in the elementary school, and very often in the high school one finds quite elaborate systems being used. The writer believes that there is a certain value in it all, but as a rule it is very slight. The beginning of this line of work and thought may be as early as the fourth or fifth grade of the elementary school, where free-hand cutting of paper dolls' clothes gives an insight in a simple way into the relation between line and figure. This is of great

value to the child. The work is free, never stereotyped, and these small paper garments may be basted together or real material made into garments using the paper patterns. There is so much to be crowded into the domestic-art work of the elementary school that the writer believes it much better in nearly every locality and under varying conditions for the use of commercial patterns to be taught in the upper grades rather than any form of drafting. If girls can be taught to cut out garments easily and correctly and make simple alterations of patterns, much has been gained. In the ordinary high school, either manual training, or classical, where some domestic-art work is given, some simple drafting and pattern modelling in crinoline is advisable. The simple modelling should precede the drafting, so that the lines of the pattern in relation to figure may be learned. With these relationships in mind, drafting will be quite intelligible and enables the girl to put it to practical use later. If this work is combined the student will have an excellent idea of the making of real patterns and be able to originate and plan for simple gowns in crinoline as a pattern, thus learning an additional method and one which is more full and natural.

In technical and trade schools it is often advisable that the students study some regular system of drafting and have quite a good deal of experience in making patterns by both of the above methods. This work should be more advanced than that given in the other types of secondary schools mentioned.

Errors in teaching drafting of patterns.

The greatest error in the teaching of drafting is the stereotyped dictation method by which it is often presented. This may not be an error where older students with limited time and familiar with such work are receiving instruction, but in either elementary or secondary schools where the training of the girls is being considered and drafting is being presented for the first time this method of approach is certainly wrong. The children may actually work it out as they would a puzzle, but there is no real connection of line with the idea of human form and the girls are not being taught to think for themselves. This criticism is especially true of high school teaching. It is possible, however, by a simple developmental method to make the girls think, and to have them understand before they begin to draft the necessity of certain lines, the relation of one line to another,

their relation to the human form, and the possibilities of change to suit the different figures and styles. The value of crinoline modelling as a prerequisite will be seen. Even unbleached muslin may be used in this connection to advantage, and the modelling done on one another in class. This method of presentation may be accomplished by questioning on the part of the teacher, who must be alert and skilful in order to present her lesson successfully in this way. There is no comparison as far as results are concerned, for the girls gain a thorough mastery of the subject because it is the result of their own thought and can be used later instead of filed in note-books.

Machine work in schools.

It is often a debatable question whether machine work should be given to girls between ten and fifteen years of age. This the writer feels must be left to the decision of the teacher of each group. If the teacher of domestic art knows that the girls in her classes in the elementary school are so conditioned that they must go to work often before the work of the grades is finished, she will feel the necessity of introducing machine work early in order that this knowledge, which is of so much help, may be gained before the girl leaves

school. The teacher must be the judge as to whether there is any physical reason why a girl should not run the machine. As a rule, the short period devoted to this kind of work is quite harmless and the girls thoroughly enjoy it. In trade schools where the girls may be more closely confined at this kind of work, the teacher should be more careful and watchful. As a rule, the high school is the place where the use of machines should be begun, but in many localities it is necessary to begin it as early as the sixth grade. If the girls of a certain school in a certain locality cannot remain after fourteen years of age, this work should be included as one of the domestic-art subjects of value for the school in this locality and should be considered by the domestic-art teacher as subject-matter for her consideration and selection.

Machine work should be begun on simple articles which will give practice in straight stitching, and use of the simple attachments, before more advanced garment-making is done. Aprons, bags, cases of various kinds, covers, pillow-cases, etc., are all simple and offer opportunity for practice.

The writer has noticed much time wasted in classes doing machine work. This is nearly always

due to lack of thought and good management on the part of the teacher. She should plan carefully to have the machines always in use and so arrange that some of the class are sewing by hand in preparation for machine work while others are at the machines. An exchange can be made as occasion arises, and in this way no time is lost.

There is a difference of opinion between teachers as to the advisability of using single- or double-thread machines with beginners. The writer finds the single thread of value during the early process of learning because it is easily ripped, but difficult to handle because of the necessity for stitching on the right side of the garment. As it is not possible to have two sets of machines, the writer believes that a light-running double-thread machine will prove the most satisfactory in the long run.

Millinery and embroidery.

Millinery and embroidery are subjects which may be taught in either the elementary or high school and may be continued in trade or technical schools or classes. The work given in the grades must be quite elementary in character. The children may buy their own frames or hats to be trimmed, or even prepare them from braided raffia. Simple lessons in bow-making may

also be given. The domestic-art teacher of each school, however, must decide whether there is time to include millinery in her course and whether it will be of value to her group of girls to have it, rather than some other line of domestic-art work. Expert millinery and trimming should not be expected from young girls. Even in trade and technical schools the trimming is an art which may be demonstrated by an expert trimmer, but it seldom happens that girls under twenty are proficient in this line or have learned the fundamental technique which would enable them to be good trimmers. This branch of the work requires experts where the work is done for trade purposes; it seems almost innate and can seldom be taught.

The high school work in millinery may include the making and covering of all kinds of hats; frame-making, trimming, and renovating. The lessons should be illustrated by blackboard drawings, pictures from magazines, and demonstrations. Visits to shops are of value in this connection for study of styles. The type of school will determine how much of this work should be given and whether this or some other domestic-art subject is of greatest value to the girl in the limited time allowed.

Simple embroidery may also be given in the grades. In the lower grades this may be in the use of overcasting, blanket stitch, and others, as a means of decoration on coarse burlap pillows, table covers, etc.; or in the upper grades, outline, cross, chain, Kensington, darning, satin stitch may all be applied on articles which will be of interest to the pupils. Design work given by the art instructor should be closely in touch here, as well as in high school, where more advanced embroidery may be given if time permits and it seems of most worth to the group of girls considered. There is always interest in this class of work, and it may be presented all along the way either as supplementary work or to introduce variety into the course. Needlebook covers, pin-cushions, tray covers, table scarfs, pillow tops, embroidery of table linen and towels, are simply the beginning of a long list. In high school—lingerie hats, shirtwaists, collars, ties, stocks, graduating gowns, may be ornamented with simple embroidery. The demonstration frame will be found of use in illustrating the various stitches. It is well for the teacher to collect samples of embroidery and to have as many articles as possible showing the application.

It is not necessary to wait until pupils are of high school age before introducing problems in furnishing and decoration. As early as the first grade, it is possible to begin with simple suggestions in the relation of line to space, color combinations, wall coverings, etc., applied to the fitting up of small houses or rooms made from soap-boxes, if nothing else is available.

Problems in household furnishings.

A very interesting problem is one in which the whole elementary school may have a share. A room should be chosen, if available, and furnished by the different grades. Rugs may be made by some—co-operatively—couch cover, window curtains—simple hangings, pillows, table covers, and baskets, etc., may be added by different classes. If space allows and a suite of rooms can be furnished and actually used by instructors or others, it will be of inestimable value.

In many towns or cities by co-operating with large departmental stores or even smaller ones it may be possible to secure loan exhibits of furniture, hangings, or house furnishings which if well arranged will be of great value to the pupils. In some schools simple lessons in upholstery may be given with excellent results. Talks on hygienic furnishing

should accompany the working out of all these problems. Charts illustrating interiors make an interesting variation of domestic-art work. Chairs, tables, etc., may be cut from catalogues and arranged on cardboards. Color schemes of interiors may be furnished and plans made for the wall, floor, and covering of ceiling. With older girls in high school it is possible to sketch interiors and to color them with water-colors. It is often possible to secure drummers' sample designs for furniture, when somewhat old-fashioned, and these may be utilized in the chart work. The furniture houses are quite willing to dispose of them. A model suite of rooms is of great assistance in a high school, but it is to be hoped that all the interiors of the high school classrooms, halls, and offices may be as attractive as possible. The proper placing of pictures, casts, and plants cannot help having an effect on the general atmosphere of the school. Loan exhibits of pictures, school work, etc., are also of help. The high school course in house furnishing may be made very interesting by interspersing the talks with hand-work, either the making of charts and color schemes as suggested or the weaving and embroidering of pillows, covers, or other house furnishings. The importance

of the simplicity of furnishing, the planning with reference to use, adaptability, and economy of time, energy, and money, the true home atmosphere and the relation of furnishing to it should all be brought out in the talks or discussions. Books and pictures will be found of much help in a course of this kind.

Lessons in design should go hand in hand with domestic-art work, and all teachers of domestic art should have a good course in design beyond whatever study of art and drawing general education may have provided. If there is an art instructor in the school, the domestic-art teacher should have her co-operation and the two work together in order that unity of action may be the result. Designs for all the domestic-art problems may be worked out in this way. Paper dolls and their coloring, dressing, simple interiors—all may come under the direction of the art supervisor and in the elementary as well as high school should go hand in hand with domestic-art problems and the two be worked out in harmony. The interest in the art work is much more keen when this definite relationship is seen and understood.

Design as part of domestic art.

One of the most important subjects for growing girls is a knowledge and close acquaintance with the

laws governing health. The influence of proper food and clothing on health cannot be overestimated. It is part of the domestic-art teacher's privilege to give talks as supplementary work while teaching the technique of sewing, or to have definite periods devoted to the discussion of this subject. This work should be given in a very simple way in the elementary school, but in the secondary schools tests in relation to materials, their strength, warmth, texture, shrinkage, and cleanliness, may be worked out in the laboratory and be of particular value. The talks for either elementary or secondary work should cover such subjects as the following:—The care of the body, cleanliness and use of underwear, the brushing of garments, care of the feet, proper footwear, dressing of the hair, proper hats, the storage of clothing, etc.; many of these may be illustrated by demonstrations.

Repairing and hygiene of clothing as part of this field of work.

The question of how and when to teach repairing is a much disputed one. As a rule, in many schools the subject is disliked by the girls and there is a loss of interest when repair lessons are announced. This lack of interest need not necessarily follow, and the success of such work will depend on the ingenuity,

skill, and tact of the teacher. Perhaps a clever way to present the repair work is between problems of greater interest—just before Christmas gifts or some other application of vital importance. Simple patching, darning of stockings, and darning of simple rents in woollen or linen materials may be given in the fifth, sixth, seventh, or eighth grades. If possible it is best to begin repair at once on the stocking or garment, but if such things are not available scraps of stockinet or cashmere must suffice. By canvassing among the teachers of a school or impressing the children with the necessity of bringing the necessary stockings from home it is quite possible to have a direct application of the repairing. Repairing which necessitates a knowledge of the construction of garments is a part of high school work, and rebinding of skirts, replacing worn collars or cuffs, patching, replacing parts of worn sleeves, are too difficult to be given to children of elementary school age, for they require good judgment, skill, and technical knowledge of garment-making for proper execution.

Christmas gifts.

The yearly festivals are always of interest to the children, and the more nearly it is possible for the domestic-art teacher to relate her work to their life interests, the more effective

will be the results. Simple Christmas gifts may be prepared by children of every grade. They should be simple, appropriate, artistic, and adapted to the use of the little giver. The time devoted to the making of these may be a part of the regular sewing programme each year, or it may be given as extra work for those who finish ahead of their class-mates.

The Christmas season is often a happy time for informal exhibits of the work of the children; the parents may be invited, and a real social feature made of this part of the work. The annual exhibit may be more formal, but the Christmas party may show the progress of the fall term of work and be an incentive to many of the children. The rooms and blackboards may be decorated by the children, and the domestic-art laboratory may become a centre of school interest and spirit. If a special room is not set aside for this work, then the principal of the school may be willing to designate a certain room or space for this particular feature of the life of the school.

Care of supplies saves time.

"A place for everything and everything in its place" is a very good general rule with which to start. The work bags or boxes of the children should be carefully labelled and kept in a conveniently located

place, if possible. Extra supplies and materials should be so classified and labelled that they may be found with ease. A system of noting when supplies are low will guard against a general skirmishing about at the eleventh hour for a particular kind of machine needle or a certain number of thread, and the consequent loss of time involved.

If the teacher has a special room for her work, she should have the supplies most often used and such materials as she may need for demonstration conveniently at hand. If as supervisor she must travel from room to room in the school, a box for her use may be kept in each room, or one supplied with the few things she is most likely to need carried from class to class. The demonstration cloth mentioned above will be found an almost indispensable addition to this box for the quick demonstration of the method of making stitches. This cloth may be mounted in the frames for such purpose or easily adjusted with thumb tacks to the wooden frame of a wall map and the height so regulated for the use of children as well as teacher. In demonstrating on this cloth the stitches should be very large so the children at the back of the room may have no difficulty in seeing. This is of help, for the teacher is

spared the necessity of giving so much individual attention later and time is thus saved for other more important work.

References for Study

"Textiles and Clothing," Watson.
"How We are Clothed," Chamberlain.
"A Sewing Course," Woolman.
"Occupations for Little Fingers," Sage and Cooley.
"School Needlework," Hapgood.
"Domestic Art Review," February and April, 1909.

CHAPTER V

THE STUDY INVOLVED IN PLANNING A DOMESTIC-ART LESSON OR SERIES OF LESSONS

From previous discussion, we have discovered that it is absolutely essential for the teacher of domestic art to know thoroughly her technical subjects. It is also quite as important for her to understand the child or pupil before her, and it is again as truly necessary that she should have some definite plan of action in mind when she brings that subject-matter to the pupils, *in order that the best results may be obtained with the greatest economy of time.*

Much discussion might be given to the best method of presenting the domestic-art subjects, but they are so varied, as well as the conditions governing them, that it must be left to the individual teacher to present the type of lesson which is best adapted to the needs of her pupils, their environment, aims, etc., as well as the subject under consideration. It may be best to enumerate the various types, and

illustrate later the inductive-deductive form most often used, although not exclusively, in teaching domestic art in the elementary and secondary schools.

The use of the lecture method is well known. It is dangerous if used entirely with young people, because the thinking is so often done by the lecturer and there is no self-activity on the part of the student; he does not think and learn through the thinking process. It is unsafe to leave it as lecture without further discussion and illustration. The demonstration method may be a part of the lecture method and is simply a better kind of lecture, for it helps to furnish illustrations which make for stronger impressions.

1. The lecture method.

Text-books should be used as a side issue, or for supplementary reading or study, never as an end in themselves. They may be used as a starting-point for introducing a subject, or as a supplement to the lesson presented. Before using the text-book, the instructor should be sure that the child understands the questions, and then he should be left to work out the answers for himself. There is danger in this kind of work, for the pupil may do too much memorizing and fail to get

2. The text-book method.

the full meaning, unless the teacher supplements this with other methods of study.

3. The drill lesson.

The drill lesson is of value because it leads to certain definite motor and intellectual habits. A real drill, although a repetition, need not be monotonous, for plenty of opportunity may be given for application. Facts should be presented in drill as we wish them recalled, the use of stitches, etc. Perfect work is the result of drill, and much will depend on the previous method of association of ideas, as the work is gone over from the old point of view. The physical as well as mental side of drill lessons should be of interest to teachers of domestic art. Habits are formed by trial and success method, by imitation, and through new ideas told the child. We learn most through imitation and this method is not to be despised. The teacher must consider too, in this type of lesson, the pleasurable element, for it is of importance if good habits are to be formed.

4. Review lesson.

The aim of the review lesson is to recall old habits that have been formed by drill lessons, or by reasoning, but to recall them perhaps from new view-points. This broadens the outlook. From these new stand-points it is

possible to apply the knowledge gained to new situations.

5. The deductive method.

By deductive method is meant that way of presenting a lesson, which gives first, the rule to be learned, illustrates this rule, and then expects the pupils to make direct application. The procedure is from a general statement to a particular application until proficiency is gained. Care must be taken in presenting any subject by this method that the class is ready for the step or abstract statement when it is presented. Variations of the rule cause thought and lead to a better understanding, but the discussions of the class should illustrate why they fall under different heads.

6. The inductive method.

By the inductive method is meant the general procedure through reasoning from individual notions to generalizations. The reader is referred to Dr. McMurray's book on "The Method of the Recitation," where the five formal steps are discussed at length. By the first step of preparation is meant the clearing of the ground, as it were, for the new truth to be presented. It is the conversation or questioning which leads to the point of contact between the ideas which are the child's, and the new thought to be presented. The teacher

is discovering what is the apperceptive mass of the pupil before her and how far back she must begin in order to make the new truth plain. There may be many avenues of approach in preparing to present the new lesson. New facts are not introduced in this step, but old experiences recalled, which prepare the pupil's mind for the new experiences to follow. Between this and the second step of presentation there must be close connection. The questions must be clear, interesting, and definite, and such as will arouse thought. They must follow, too, in close sequence. There must be a definite aim in mind for presentation, an aim for the child as well as for the teacher, whose aim is naturally broader but includes that of the child. The child's aim should be made plain, so that he starts out with a definite plan in mind. The more realistic the teacher can make this the better. The teacher must keep in mind also the doctrine of interest and make the subject vital and arousing. The illustrative material will naturally depend on the subject and age of the child, but should be varied so as to appeal to as many senses as possible. The aim of the lesson to be presented should be constantly in the teacher's mind, and she should not be swerved from this purpose

unless it seems wise in developing her subject to change. This may be due to a discovery that her class is not quite ready for the new thought. The teacher should be quick, alert, and ready to adapt herself to any change in method of procedure when necessary. The main or "pivotal questions" in the new lesson should be firmly in mind, so that should there be a digression it may be possible to return easily to the course of procedure.

Comparison need not necessarily be made in each lesson, although given as the third formal step. Generalizations are comparatively few and very often may not be made until after a series of lessons on a given subject have been presented. By generalization is meant the review by comparison of individual facts, and by picking out the common essential characteristics, the formation of a general notion in relation to a particular set of ideas. This generalization should be given by the pupil in his own words and then supplemented or rounded by the teacher and text-book. This rounds up the sequence of thought, whether it be in a lesson or at the end of a series. The application comes as a test when the new generalization or concept gained is to be used. This, too, may come at the end of a

lesson, and often not until the end of a series, or longer period of study. In domestic-art lessons the step of application of principles consumes much time.

The inductive method is often objected to because it is too slow. Then, too, it cannot always be applied effectively to all subjects. It is, however, one of the most useful methods of approach in teaching domestic-art subjects and is used with much success in combination with the deductive approach.

General principles of method to bear in mind.

There are certain general principles of method, however, for the domestic-art teacher to bear in mind in planning her lessons.

1. Every good lesson should be planned to begin with what is in the child's mind, and proceed to the unknown, that is, there should be some preparation for the second step through use of the old ideas. The psychologist calls this general principle the law of apperception.

2. There should be two definite aims. First, the teacher's, a general topic to be taught, which means that the teacher knows much more about her subject than she will present to the class, but she selects that part of her knowledge which she wishes to present to the children and adapts it to their needs. The teacher has also for her aim the developing of right

habits, intellectual, motor, and moral, the cultivation of the child's reason, and the training of his powers of appreciation. So we may say her aims are: concrete or practical, ethical, and social. Second, the pupil's aim must be definite, clear, and concrete. If the teacher would hold the interest and attention of her class, she should make the problem or aim as attractive as possible.

3. In selecting and adapting the subject-matter to be taught, the teacher will bear in mind the age of her pupils, their previous training, and the subject itself.

4. Every good lesson plan should contain certain pivotal questions to be used in the lesson. These should be logical, hold the attention of the class, and control the reasoning powers of the pupils.

5. The teacher should have in mind definite illustrative material—the kind, how it is to be used and where introduced to make the lesson effective. This material will help to centre the attention and gain the interest of the class.

6. The teacher in planning should keep in mind the self-activity of the child. This is to be exercised by him in thinking out his questions and answers—in thinking out his applications and in giving physical expression by doing.

7. There should be in nearly every lesson a summary or review of the main points covered in the lesson. This should be short, concrete, and quickly

accomplished, focussing as it were the thought of the hour.

8. Whenever possible there should be some application of the lesson to broader fields.

We have discussed the main points for the domestic-art teacher to keep in mind while planning, but how is this actually to be done? Until one becomes quite experienced it is wise to write out each lesson quite fully. It will more than repay those who make the effort. Planning in this way is a benefit, for it enables the teacher to know if she has accomplished all she had in mind. The actual lesson may be compared with the plan step by step, and the points of discord noted. Very often the teacher will discover that she has improved on her plan. The self-criticism of a young teacher is bound to count as an element in her success. If the teacher must present the same lesson to several sections of a class, it would be wise to try different methods of approach in presenting the same lesson and compare the results.

Young teachers should write out their daily plans.

Before planning the lesson of the day, the domestic-art teacher must have clearly in mind, if possible, the plan of action for the year. This will be dis-

cussed under courses of study for elementary and secondary schools. This yearly course will be made up of a number of problems to be presented. A problem may need from one to ten lessons, or more, for its completion, and for each one of these day lessons a definite plan should be prepared. Before planning for each day it is well for the teacher to make a general scheme, which will give a bird's-eye view, as it were, of the lessons given to the accomplishment of that problem, or to plan the series of lessons so that she may be sure to group all the material to be presented about that series of lessons. By this method it is easy for her to distribute the supplementary material throughout the series, and to keep constantly in mind the results to be accomplished. It is well, too, for the teacher to know what materials are to be used, the amount and cost per child, as well as the illustrative materials, books, and supplementary talks.

Outline of series of lessons to precede the daily plan.

The following scheme for the series of lessons, covering in a general way the work to be accomplished, may be suggestive, as well as the daily lesson plans which follow. They will serve to illustrate the points made above.

STUDENT PLAN

Outline for Series of Lessons

Subject.—Cooking apron.

School.—Elementary School, New York. *Grade.*—7th.

Age.—11 to 15 years. Average age, 13 years.

Number of Lessons.—Nine approximately—1 hour each.

Teachers' Aims.—

(Ethical). To develop self-reliance arising from consciousness of ability to do.

(Social). To emphasize the importance of cleanliness and economy.

(Concrete). To compass the steps necessary in the planning and making of a cooking apron.

Pupils' Aim.—

To cut and make a cooking apron neatly by machine.

- Materials
  - Illustrative
    - Finished apron.
    - Samples of material suitable for aprons.
    - Samples of bleached and unbleached material.
    - Samples showing
      - Hems.
      - Stitching.
      - Gathering.
      - Buttonholes.
      - Sewed-on buttons.
    - Demonstration frame.
    - Chalk.
    - Blackboard.
  - To be used
    - Scissors.
    - Pencils.
    - Thread.
    - Sewing boxes containing
      - Tape measure.
      - Needles.
      - Thimbles.
      - Pins.
    - Apron lawn for the aprons.
    - Buttons.

Subject-Matter

I. Discussion of choice of material according to
- Use.
- Suitability.
- Durability.
- Cost.

II. Economical cutting.
III. Bleaching of materials.
IV. Making of apron.
- (*a*) Laying hems.
- (*b*) Basting.
- (*c*) Stitching.
- (*d*) Gathering.
- (*e*) Stroking of gathers.
- (*f*) Making buttonholes.
- (*g*) Sewing on buttons.

V. Kinds of aprons.
VI. Textile talks on cotton manufacture.

Cost per child, 25 cents.

NOTE.—This subject-matter to be presented during course of lessons. Not in order given, but this ground to be covered as seems best in daily development of plans.

ELEMENTARY SCHOOL

DAILY PLAN. LESSON I

Grade VII.

Subject.—Cooking apron.

Teachers' Aim.—To have pupils gain an intelligent and economical use of material through the planning and cutting of a cooking apron.

Pupils' Aim.—To cut the apron.

SUBJECT-MATTER*	METHOD
	NOTE.—Step of preparation. This shows the method of questioning and of preparation for the new facts to be presented. It is introductory and leads to new work.
Introduction.	As you know, I have been visiting, several days, in your schoolroom. I want to speak of some-

* This subject-matter column should show the material which the teacher has in mind on this subject as best fitted for the children in this particular class. This is the first lesson only on this subject and shows only the subject-matter for the first lesson.

thing I have noticed while there and that is the neatness of your desks.

Reference to neatness of desks.

I was glad to see it because I felt that girls who had formed the habit of keeping their desks neat would be quite likely to be neat about other things, so I hoped your work in sewing would be as neat as your desks.

The kitchen another place where neatness is necessary.

Neatness is desirable in many places. It is very necessary in the kitchen.

Cooking apron.

When in the kitchen we not only want to keep the kitchen neat, but want to keep ourselves neat also.

What could we make in the sewing class which would help to keep us neat when at work in the cooking class?

To help keep the work and clothes of the wearer clean.

Why are aprons worn?

Aprons differ in { Color. Material. Style of making. Durability. Cost. } according to their use.

Are all aprons alike?

How do they differ?

Materials suitable for cooking aprons—lawn, cambric, gingham, and calico, etc.

Of what materials may cooking aprons be made?

An apron worn by a person cooking should always be clean.

In what condition should the cooking apron always be?

White or light colors are the most desirable for cooking aprons.

Do you think light or dark colors would be best to use for cooking aprons?

Advantages—

(1) They show when soiled, therefore are not as apt to be worn after they become soiled.

(2) As white soils easily the wearer will be more careful about her work.

(3) White is more cheerful and looks better than a dark color.

Why? What are the advantages of white and light colors?

Cooking aprons to be made of apron lawn, which is 40 inches wide and costs 11 cents per yard.

I have apron lawn for you to use for your aprons, but I would like to have you bring some samples next Friday of materials either white or colored which you think would be suitable for aprons.

Find out the cost and width of the material you select.

Other suitable materials, for aprons, to be collected and width and price noted.

NOTE.—Beginning of the presentation of the new work, the aim being to cut the apron. Notice method of developing ideas in relation to cutting.

A pattern is not necessary for a cooking apron when the maker has a model, or a clear idea of the kind of apron desired.

Let us see how many things we must think about in cutting out an apron.

Is it necessary to have a pattern for a cooking apron?

Size of the apron—

Length of { Apron. / Bib. / Belt. / Straps.

Width of apron and bib.

Width of belt and straps 2 inches.

Size of hems { Wide, 2 inches. / Narrow, ½ inch.

After the material is selected what is the first thing that must be decided upon?

Measures taken of person for whom apron is being made.

Length of skirt.

Length of strap from waist, over the shoulder, and across the back.

Size of waist.

How may this be determined? (Children to take each other's measures. Each child to write down her own measures.)

Cut with the warp threads running lengthwise of the pieces.

For strength.

Two widths will be needed.

Avoid a seam in the centre of the front by dividing one width lengthwise through the centre and sewing one-half width on each side of the whole width.

Two pieces for belt.
Two pieces for straps.
One piece for bib.

Waist measure taken loosely, 1 inch allowed for lap and $\frac{1}{2}$ inch for finishing.

Which way of the material will the pieces be cut?

Why?

Will one width be sufficient for the skirt of the apron? How many will be needed?

Would a seam be desirable in the centre of the front?

How may this be avoided?

What other pieces will be needed?

How will the size of the belt be determined?

How can we cut the pieces required from the material we have to the best advantage?

(Use the board for illustrating, ask children to suggest ways of arranging the parts.)

Begin at the straight end of the cloth.

Where will you begin to cut?

Pieces to be measured, marked with pins, creased, and cut on crease.

Some material can be measured and torn, but this lawn does not tear satisfactorily so we will measure it carefully, mark with pins, crease, and then cut on the fold.

Compare and discuss different ways of arrangement if the class has suggested them, if not give only one drawing.

Directions for work.

Give each child a piece of lawn 2 yards long.

Pass scissors.

I would like to have you cut your aprons out to-day, but when you measure and crease a line I want to see it each time before it is cut.

This is a statement of aim of work for the day.

Work—

Measuring and cutting of pieces.

(1) On one side of cloth measure a $6\frac{1}{2}''$ strip the entire length of the cloth.

Mark with pins or pencil dots.

Crease on places marked.

After I have seen it, cut on the crease.

Strip for belt.

(2) Measure a 2″ strip off the $6\frac{1}{2}''$ strip in the same manner.

Two strips to go over the shoulder.

(3) Fold the $4\frac{1}{2}''$ strip cross-wise through the centre, be sure to fold the edges together evenly, crease and cut as before.

(4) Fold and pin these three strips together.

(5) From the straight end of the cloth measure 27″ on both edges and in the centre, fold on marks and crease, before cutting on the crease see that material is evenly folded and cut across goods along the even edge.

Middle width and piece to be divided.

(6) Cut on the fold; this gives two pieces the same size, 27″x 33½″.

Side pieces.

(7) Fold one of them lengthwise through the centre, crease, and cut.

(8) Pin these two pieces to the largest piece you have.

(9) You have one piece left. How long is it?

Bib.

(10) Measure a piece 9″ long and 8″ wide, fold, crease and cut. Round corners slightly at lower edge.

(11) Fold the small piece that is left and put it in your sewing-box.

(12) Fold your work and pin your name on it.

. . . . . .

Work put away.
Scissors collected by one child.

Put things away in your sewing-boxes.

As soon as your work is put away sit down and face this way.

Summary of points brought out in the lesson.

How many think they could cut an apron out at home like the one we have just cut?

Suppose you were going to make one for some one at home, who can tell me how to begin it?

What would you do next?

STUDENT PLAN

Outline for Series of Lessons

Subject.—Weaving rug.

School.—Elementary.

Grade.—III.

Number of Children.—22.

Age.—8–9.

Number of Lessons.—5.

Teachers' Aims.—

(*a*) Practical; weaving rug with pattern.

(*b*) Ethical; habits of accurate thinking and doing, perseverance, and patience.

(*c*) Social; relation of rug-weaving to home and school, adaptation of material used.

Pupils' Aim.—Weaving rug.

Materials.—22 pieces cardboard, belt punch, 44 balls jute (several colors), paper, No. 19 tapestry needles, scissors, thimbles.

Cost per Child.—5 cents.

Illustrative Material.—Blackboard, small pieces of canvas showing selvage and warp and woof, large cardboard with bright-colored jute for demonstration, rug on small cardboard partly woven, finished rug.

Outline of Subject-Matter.—

(1) Weaving rug. Planning size, arranging holes for warp thread, threading needles, making knot, putting in warp thread, weaving woof threads (darning, shuttle, heddle, batten), selvage, joining threads, making simple and pleasing stripe for pattern, removing from card, fringing.

(2) Accuracy of thought, skill.

(3) Jute, cultivation, manufacture, use, adaptation.

DAILY PLAN. LESSON 2

Subject.—Weaving rug.

School.—Elementary.

Grade.—3d.

Teachers' Aim.—Have pupils put in pattern of two stripes and begin weaving centre of rug.

Pupils' Aim.—To weave part of rug.

Subject-Matter	Method
	Every one looks happy and eager to work this afternoon. I'm glad, for we have a great deal to do and we'll want to do it *well.* You've heard the old saying, "What's worth doing at all, is worth doing well." I'm sure we all feel that it is worth while to weave a small rug for the doll's house and so it is worth weaving well.
Drew woof threads too tight, so made width of rug uneven. Didn't tighten up the woof enough to make good, firm, solid material.	Let us think for just a second what troubled us in our weaving last week. William, can you tell us?
	We'll try to overcome those faults to-day and keep the woof threads loose enough to make rug even; also push the woof thread well up to the end every time.
In weaving, the jute was passed under and over the first time across, and over and under coming back.	Just how did we put in the woof threads?
Join well in toward centre, never on selvage. Leave ends about 1" long on wrong side. See Lesson 1.	Who remembers how we piece the thread?

I expect every child to put in two narrow stripes and begin weaving centre of rug. Every pupil ought to have a good rug.

Stripe is to be of different color. Begin near centre under same warp thread with first color. Weave in two or three threads across for narrow stripe and six or seven for wide one with few threads of brown between.

Demonstration on blackboard and large cardboard, illustrating method of going over and under the alternate threads and of piecing the woof by lapping near the middle of woven material.

Demonstrate with bright color.

On last row of stripe leave off where you began. Cut thread with long end, leaving it on wrong side of rug.

Tell the class, Lulu, what they are expected to do in the next half hour. How many think they can do it, and do it well? Good! we'll be first-class weavers.

Pass rugs, jute, scissors.
Work begins.

. . . . . .

Woven two stripes and begun on centre, keeping width even and woof well battened.

Those who have done what I asked them to do, hold up rug, please. We've done very well this afternoon.

Over and under alternate threads, careful joining of thread, width of rug, close firm mesh.

What are the things we need to keep in mind to be good weavers?

Collect.

STUDENT PLAN

Outline for Series of Lessons

Subject.—Making a petticoat.

School.—Public. *Grade.*—8th.

Age of Children.—14.

Number of Lessons.—12.

Teachers' Aim.—To teach the girl to make a neat, useful petticoat for herself by machine, to give her an understanding of the varying conditions under which ready-made underwear is made, and the girl's responsibility as a consumer.

Pupils' Aim.—To make a petticoat for herself.

Materials.—

(*a*) Actual (for each girl):

Cambric, 2 lengths.
Ruffling, 3½ yards.
Button.
Thread, No. 50 and No. 80.
Needles.
Scissors.
Thimble.
Tape measure.
Pins.
Emery.

(*b*) Illustrative:

Paper.
Demonstration cloth.
Pictures of factory life, sweat-shop labor.
Work of the Consumers' League in bettering conditions.
Plackets of various kinds.
Finished skirts.

Subject-Matter.—

Points covered in making the petticoat:

(1) Cutting of the skirt from two lengths of material.

(2) Pinning and basting seams.

(3) Making French seams.

(4) Putting in the straight placket.

(5) Preparation of the top of the skirt for the band (sloping, gathering).

(6) Fitting the skirt to the band.

(7) Putting on the band.

(8) Preparation of the bottom of the skirt for the ruffle.

- (*a*) Curving the bottom of the skirt (not necessary when cutting from a pattern).
- (*b*) Creasing and stitching the ¼-inch tuck.
- (*c*) Division of skirt into quarters.

(9) Preparation of the ruffle:

- (*a*) Cutting to desired width.
- (*b*) Joining.
- (*c*) Division into quarters.
- (*d*) Gathering.

(10) Fastening of the ruffle to the skirt.

(11) Button-hole (practice, then make in the band).

(12) Sewing on the button.

DAILY PLAN. LESSON 8*

Subject.—Making a petticoat by machine.

School.—Public.—Elementary.

Grade.—8th.

Length of lesson—One hour.

Teachers' Aim.—To stroke the gathers of the ruffle. To baste a part of the ruffle to the skirt, distributing the gathers properly.

*NOTE: The first seven plans are omitted; this is given as a type.

Pupils' Aim.—To stroke the gathers of the ruffle. To baste a part of the ruffle to the skirt, distributing the gathers properly.

Subject-Matter	Method
To prepare the ruffle for gathering, these steps were taken: 1. Cutting of the ruffle to the desired width. 2. Joining of ruffle (French seam). 3. Dividing of ruffle into quarters.	Tell me very briefly how you prepared your ruffle for the gathering—simply name the steps.
An embroidery ruffle is prepared in the same way.	Can you think of any other kind of ruffle that would be prepared in the same way?
	We seldom get ruffling already prepared for us. If we wish to have a cloth ruffle we must usually cut it and make it.
In a cloth ruffle, the woof threads extend the length of the ruffle and the warp threads up and down—the same way as in the body of the skirt. The material cuts to better advantage in this way and the ruffle looks better (falls into prettier folds).	How many of you have ever made a cloth ruffle or have seen one made? Which set of threads extended the length of the ruffle? Why?
	(Teacher shows a cloth ruffle on a skirt.)
In making a cloth ruffle, a number of strips should be torn across the material.	(Teacher makes a diagram on the board to illustrate the way in which the strips are torn for the ruffle.)
The depth of the strips = the depth of the ruffle when finished + the amount for tucks, hem, and making.	In measuring the depth of the strips, for what would you have to allow?

The number of strips needed depends upon:

(1) The width of the material.

(2) The width of the skirt around the bottom.

(3) The amount of fulness desired (usually 1½ times).

What would determine the number of strips needed?

After the strips are cut, they are joined.

The hem and tucks are then put in. The ruffle is quartered and gathered.

(Teacher names the steps taken in finishing a cloth ruffle.)

Before the ruffle is fastened to the skirt, the gathers must be stroked. It was not necessary to stroke the gathers at the top of the skirt, because there were two rows of gathering.

In the ruffle there is but one row of gathering, therefore it is necessary to stroke the gathers.

I shall show you to-day how to stroke the gathers quickly.

Stroke gathers because it is a help in getting them distributed evenly.

(Teacher explains reason for stroking gathers and demonstrates the stroking.)

For fine materials, stroke the gathers with a coarse needle. For heavier materials, stroke the gathers by drawing them between the thumb and forefinger—pressing them. The gathering thread is held firmly—may be pinned to the knee.

(To show the importance of stroking gathers, teacher shows two gathered pieces. In one, the gathers will have been stroked; in the other, not.)

After the gathers are stroked, the ruffle is ready to be fastened to the skirt.

Divide the skirt into fourths corresponding to the division of the ruffle. Mark the divisions with several large stitches.

Since the ruffle was quartered for the gathering, what should be done to the skirt before attaching the ruffle, in order to get the gathers evenly distributed?

In pinning and basting the ruffle to the skirt, the following points should be considered:

I shall show you how to pin and baste the ruffle to the skirt.

(1) Wrong side of ruffle to wrong side of skirt; (2) joining of ruffle in the back, divisions placed to correspond; (3) draw up the gathering thread and wind it around a pin; (4) pin (pins extending at right angles to the gathering thread), distributing the gathers evenly, gathered side next to the worker; (5) baste (being careful not to disarrange the gathers) $\frac{1}{4}$-inch seam.

(Teacher demonstrates the pinning and basting of the ruffle to the skirt.)

Now you may stroke the gathers of your ruffle, then fasten the ruffle to the skirt. Every girl should get at least one quarter of her ruffle basted to-day.

Girls work for remainder of hour, and after work is collected there is a brief summary as suggested by the question following practical work.

Practical work.

What do you think we must be most careful about in basting the remainder of the ruffle in place?

Students of domestic art in training will find it of great assistance to visit domestic-art classes for observation and discussion. If this can be done in groups, the discussions will prove of much greater value. It is well to have, before visiting a class, a pretty clear idea of the relation of domestic art to other grade subjects, and to have discussed the value of industrial lines of work, methods of presentation, etc. The greater knowledge attained along these lines before visiting, the greater will be the benefits derived, and the eyes will be opened to many things before unseen. There must be some basis for judgment of the lesson observed. It is well, also, for students to visit before there is much basis for judgment and then later, when the thoughts have become better formulated and arranged. The students' ideas should not be moulded by the teacher, but liberated so they will think and be free to observe for themselves.

The test for the judgment of a domestic-art lesson is whether it is adapted to the physical and psychical nature of the child or pupil. Again, another test is, Has the environment been kept in mind? The theory of the student-teacher, or the idea of how the thing is done, the plan of action, is often very different from the actual practice. Experi-

ence or practice should enable a teacher to understand herself, and then to formulate her own theory, for it is only with experience that there comes a clearing up of thought. This means that there is control and appreciation of action and that the teacher has reached the creative stage and understands the reactions.

The following outline may be suggestive to those not used to observing. It is wise to enter the name of class, date, etc., with full particulars in the notebook, under the following heads. The points may be discussed later and much benefit derived from the individual efforts made at observation.

OBSERVATION

(*a*) School.
(*b*) Grade. Number in class.
(*c*) Date, and name of teacher.
(*d*) Subject.
(*e*) Time allowed.

1. *The Pupils*—

(*a*) Physical condition, general health, sight, hearing, any defects. Are these considered in any way by teacher, in her plans or instructions?

(*b*) Mental aspects.

(1) Notice attention of children. How gained? Lack of attention. Causes.

(2) Note differences between the alert and active child-mind and slow or deficient child. Was class sacrificed for backward children? Effects of home training.

(3) Habit formations of the children, notice if these conduce to economy of time in class.

(4) Notice use made by teacher of other impulses, or instincts of the child, as play, curiosity, jealousy, wonder, sympathy, etc.

II. *The Teacher—*

(*a*) Type of lesson observed? Reasons why?

(1) Aim? Was it accomplished?

(2) Was the method adapted to aim of lesson?

(3) State leading steps in the development of the lesson.

(4) Were the questions of the teacher logical; strong, or weak?

(5) What appeared to you to be the best thing accomplished by the lesson?

(6) Were the children taught to think about the relation of the subject to any social problem? If so, what, and with what results?

(7) Was there any application of the lesson taught? If not, why? How might it have been done?

(8) Would you have presented the lesson in any different way?

(*b*) Class management.

(1) Devices for securing attention.

(2) Skill and rapidity. Economy of time.

(3) Storage and distribution of materials.

(4) Ventilation, heating, and lighting. Order of class-room.

(5) Class spirit.

(6) Devices for attending to routine matters.

(*c*) Personality of teacher.

(1) Appearance, manner.

(2) Peculiarities of habit. What effect, if any, do these have on the class?

(3) Did you notice any particular result of teacher's influence?

III. *The Equipment*—

(*a*) General.

(*b*) Illustrative; devices for inexpensive equipment and use.

(*c*) Storage of equipment, permanent or temporary.

IV. *The Curriculum*—

(*a*) Notice general curriculum of school.

(*b*) Notice curriculum in domestic art. Any attempt at correlation.

(*c*) Read curriculum of grade under observation, as well as previous work in domestic art.

References for Study

"The Method of the Recitation," McMurray.
"Teacher's College Record," January, 1903.
"Essentials of Method," De Garmo.
"The Educative Process," Bagley.

CHAPTER VI

THE ECONOMICS OF DOMESTIC ART

Cost of domestic art in the elementary school.

THE cost of the introduction of industrial work into the elementary school will vary according to the ways and means adopted and the ingenuity and versatility of those who have it in charge. There need be no special room for this work unless space is available. It is always an incentive to the children, however, to have a special place where this work may be carried on, and is of great assistance to the teacher. There she may collect pictures, looms, spinning wheels, exhibits of many kinds which will aid her in giving instruction and be constantly on exhibition for the children's use. The classes will go to this room for the domestic-art work, especially the upper grades. If machine work is given as part of the course, it is almost necessary to have a special room, although it is possible to have the machines in the class-room. If the school is coeducational,

this will necessitate certain changes, as the work for the boys must be considered too.

In the lower grades the industrial work of which the textile field is one phase may be carried on in the class-room. The many possibilities in the wide range of material for selection make it possible to reduce the cost of this work to five cents per child per year of one hour a week. Many schools allow more than this. The cost of materials will depend too on the person in charge of the work. If left to the individual grade teachers who know nothing of this field of work, there is apt to be a greater waste than if there is a well-trained ingenious supervisor to control costs. Such supervisors will command salaries ranging from $1,200 to $2,500 and in some instances in large school systems $3,000 and more. This is really an economy in the long run, for the work will progress more smoothly, it will be better planned, the children will be better taught, with better results, and there will be a saving in expenditure for materials.

The permanent equipment in the lower grades may be very inexpensive. A general supply of scissors, emeries, tape-measures, etc., may be taken from room to room if it is not possible to have

enough for each grade. Thimbles may be brought from home by the children and so the cost of permanent equipment be reduced to almost nothing. The same may be true of materials used. A teacher who is awake to the possibilities of odds and ends that are thrown into the waste-basket will be able to reduce the cost greatly. If it is possible to have the equipment for each grade, it may be bought as follows:

1 dozen	thimbles	.25
1 "	emeries	.40
1 "	scissors	3.00
1 "	tape measures	.40
1 "	boxes for work	.84
Permanent equipment for one dozen children		$4.89

If it is not possible to afford the cloth-covered boxes for the work, as itemized above, envelopes of bogus paper may be made and decorated by the children, or it may be possible to obtain from some local shoe department store boxes of uniform size and shape, for very little cost, and often for nothing. Tools for other lines of hand-work besides the sewing are scarcely necessary. Clay work may require a simple wood tool, but one can manage without it, or with an odd bit of wood sharpened to

a point, which need cost nothing. For weaving there are many simple looms on the market ranging in price from 20 cents to $1.50, but it is far better to have the children make their own looms of cardboard or wood. Cardboard and paper work in the lower grades need necessitate very little expenditure for tools. The scissors used for the sewing may be used, although it is better to have a separate set for paper work. This set may be used also for the other industrial work of the lower grades.

In the upper grades the cost of maintenance of the work will vary. Some school boards allow as much as twenty-five cents per year per child. This will make possible a number of small applications for stitches. If large articles or garments are made, the parents are quite willing to pay for the cost, as they realize the utilitarian value of the product. The teacher should be careful, however, to have the children make articles which will fit the needs of the home. If a child is too poor to pay for the cost of the article, the child may earn it by service in school, or it may be made for sale and bought by the teachers for exhibit or other purposes. Visitors often ask for samples of the children's work, and

sales may be made in this way. It is almost a necessity to have a special teacher in the upper grades, and really an economy, although the work is often conducted by the grade teacher. The equipment in the way of tools may cost very little as outlined above, and one set of tools may be used for all the classes; or each grade may have its own, which is of course more desirable. The cost of furnishings for a simple laboratory may be kept very low. The room should be large enough to seat the children comfortably, should be well lighted, the walls tastefully decorated, and have convenient space for storing materials. This room is almost a necessity where the school is a local centre for work and the children of the neighboring schools attend it for their exercises in domestic art. This method is adopted in smaller towns and cities in order to reduce the cost.

The special room is also an incentive to work. Children will often visit it at odd periods for completion of back work, or because of interest in the exhibits and a desire to study. It should be a centre for such information as the teacher of domestic art has to give. There should be low chairs for sewing, work tables, a cutting table, machines,

blackboard, etc. This special room may often be used for other purposes, as the sewing classes may not occupy it during all the periods. On that account it is wise to have folding tables which may be removed when it is necessary to clear the floor space. Tables hinged and attached to the walls may be let down and be out of the way when it is necessary to remove them. The following is a list with cost of a simple, inexpensive laboratory equipment for grade school use for twenty-four pupils:

2 dozen chairs	$24.00
8 work tables	16.00
2 cutting tables (kitchen tables stained)	6.00
4 sewing machines	100.00
Teacher's desk	10.00
" chair	3.00
1 demonstration cloth and needle	.50
1 dozen waist forms	6.00
1 gas stove	1.50
2 flatirons	.72
1 mirror	2.00
Total cost	$169.72

Good work may be done with the inexpensive equipment. Elaborate furnishings do not tend to increase the output or quality of the work. Additional facilities contribute to ease and convenience

of the worker and especially the teacher. A more expensive equipment is added below for upper grade use:

2 dozen chairs	$36.00
1 dozen work tables	36.00
6 cutting tables	60.00
6 sewing machines	180.00
1 exhibit case	30.00
1 teacher's desk	15.00
1 " chair	3.00
1 mirror	20.00
1 gas stove	3.00
6 flatirons	3.00
1 screen	6.00
1 demonstration frame	2.00
1 bulletin board	3.00
1 roll case for storing pupils' work—accommodating 4 classes	75.00
6 waist forms	3.00
1 ironing board	1.50
Total cost	$476.50

Cost in high school.

The cost of the laboratory equipment for the high school need be little more than that of the special room for upper grade work. The additional expense will probably be for the necessary articles for drafting and garment-making, such as yard-sticks, skirt forms, etc.

The cost of the temporary equipment for both elementary and high school will depend somewhat on the method of purchase of materials. Materials bought at wholesale in large quantities may be obtained at great reduction. The care and use of the temporary equipment will also regulate the cost.

The cost of equipment in other types of schools will vary according to aim, number of pupils to be accommodated, and the elaborateness of outfit. The equipment need not necessarily be expensive. The following lists of cost of articles will furnish suggestions for those interested in both expensive and inexpensive equipment:

Bias cutter and marker	$5.00
Boxes—sewing—cloth-covered—8x14x2½, per hundred	18.00
18x16½x4¾, per hundred	45.00
6½x4½x3, per hundred	8.00
Bulletin boards, each	3.00 to 5.00
Chairs—	
Bent wood, with cane seat, each	1.25
Kitchen chairs (to be stained), each	.50
Willow (for office use), each	5.00
Desk chairs (revolving, bent wood), each	3.50
" " (with arms), each	5.00 to 12.00
Laboratory chair (better class) each	3.00 to 5.00

Cases—	
Bookcases, each	10.00 to 50.00
Storage for work—for 50, each	30.00 to 75.00
Exhibit cases—gowns and hats, each	50.00 to 100.00
Exhibit cases—flat, according to size and finish	25.00 to 75.00
Exhibit cases—sliding glass doors, according to size and finish	25.00 to 75.00
Ironing cabinets—zinc top (for ironing outfit made to order)	15.00
Desks—	
Flat top—well finished, with side drawers	25.00
Flat top table without side drawers	12.00
Roll-top desks for office use, each	10.00 to 75.00
Dress forms—	
Full length, each	3.00 to 8.00
Waist length, each	.50 to 4.00
Demonstration frames (made to order), each	1.00 to 5.00
Emeries, per dozen	.25 to .50
Embroidery rings, per dozen	.75
" holders (Priscilla), per dozen	2.50
Files—	
Letter files (for office use), each	20.00 to 50.00
Card boxes and cataloguing schemes, each	1.00 to 50.00
Gas stoves, each	1.50 to 5.00
Irons, according to style and weight, each	.36 to 1.00
Electric irons, 4 lb., nickel, each	3.75
" " 6 " " "	5.75
" " 12 " " "	9.00
Mirrors—	
Hand-mirrors, each	.75 to 3.00
Triple folding wall-mirrors (millinery purpose), according to size	5.00 to 25.00

Triple folding dressmaking-mirror, each	30.00 to 75.00
Flat wall-mirrors, oak frames, according to size	2.50 to 25.00
Machines—	
Single- and double-thread, each	20.00 to 60.00
With motor attachment, each	60.00 to 70.00
Pedestals (for fitting), each	4.00 to 10.00
Pinking machine, each	5.00
Plaiting machine, each	12.00
Rollers (paper)—	
Jumbo rollers, stand, each	5.00
Drafting-paper (per roll), each	5.00
Rugs (for office use), according to size and quality	20.00 to 50.00
Rattan couch, each	15.00
Stools, 24-inch cane-seat, per dozen	13.00
24-inch wooden-seat, per dozen	7.00
Screens, triple-folding, each	5.00 to 20.00
Seatings, class-room, a seat	2.00 to 4.00
Skirt-markers, each	10.00 to 25.00
Sleeve forms (per set 2), each	4.00
Scissors—	
Straight cutting, per dozen	3.00 to 6.00
" shears, per dozen	5.00 to 10.00
Button-hole, per dozen	4.80 to 6.00
Tables—	
For conference purposes, each	20.00 to 200.00
Ironing—ready-made, each	1.50 to 5.00
Ironing, made to order with wood top, 4x2 ft., according to size and finish, each	10.00 to 15.00
Kitchen tables, 5 ft., each	2.00 to 3.00
Folding sewing tables, each	1.00 to 3.00

Drafting tables made to order—7 ft. long by 3 ft. wide by 2 ft. 8 in. high, white wood top, oak base, each	15.00 to	18.00
Drafting tables, removable tops and horses for support, each	10.00 to	12.00
Sewing-tables made to order, oak, 6 ft. long by 2 ft. 4 in. high, each	13.50	
Tape measures, reversible, per dozen	.40 to	.60
Tracing wheels, per dozen	1.00 to	4.00
Thimbles, German silver, by gross	3.90	
Wire-cutters, side-cutting, per dozen	4.00 to	6.00
Waist- and coat-hangers, per dozen	.36 to	1.00
Yard-sticks, per dozen	1.50 to	3.00

The cost of illustrative material.

Illustrative material is rather difficult to collect. The teacher of domestic art must be alert and seize every available opportunity for getting it. Many articles may be easily obtained while travelling and through interesting in the work the people one meets. Expositions furnish opportunity for securing material which will often be sold for little after the exposition is over. Large manufactories sometimes make boxes for sale illustrating the steps in the manufacture of various materials such as thread, needles, scissors, buttons, cotton, woollen, linen, or silk materials. These will often be made to order, but cost considerably more. The illustrative boxes

range in price from $2.50 to $10.00 each. Through correspondence with large museums an exchange or purchase of articles may be made. Very often, too, it is possible to have models made similar to those seen in the museums, which are often copies of originals. The domestic-art teachers should always be on the lookout for pictures and clippings from newspapers and magazines. These may be filed for reference and often prove of great value.

The salaries of teachers of domestic art vary according to locality and the demands made.

Salaries.

Teachers in the elementary school receive from $600 to $1,200 for upper grade work. This demand is most often for a teacher who can combine the teaching of sewing and cooking. When the system is a large one the demand is for separate teachers for each specialty. Supervisors of domestic art in the elementary school receive from $800 to $3,000, and sometimes more if the system is a large one. The duties vary with locality and conditions. Often the domestic-art supervisor directs the industrial work of the lower grades which is taught by the grade teacher, and does the actual teaching in the upper grades. Again the duties may be supervision of all the grades.

In other localities the domestic-art teacher does not control the industrial work of the lower grades; it may be under the direction of the manual training or arts supervisor. The ideal condition is supervision only of the upper grade work for girls in either cooking or sewing or both. This is quite enough for any one person to do well.

The salaries of teachers in high schools range from $900 to $2,000, according to kind of work and length of service. Directors of departments in high schools receive from $1,500 to $2,000.

In trade schools teachers receive from $800 to $1,200, directors of departments from $1,200 to $1,800, and school directors from $2,000 to $3,000.

In higher institutions, colleges for women, State agricultural colleges, and normal schools, the salaries vary from $1,200 to $3,500, according to responsibility.

CHAPTER VII

HOW TO KEEP IN TOUCH WITH PROGRESS IN THE DOMESTIC-ART FIELD

THE writer has often been asked if domestic art can be studied by correspondence. The answer has always been, "No, not to advantage." It may often happen, however, that a teacher has been forced into this field of work, or is not quite ready to go to a normal school for study, and in the mean time may wish to come in touch with some of the subjects. There are many lines of work in this field, and the teacher of domestic art, if she is to do the best kind of work, should know something about psychology, the history of education, and the theory and method of presenting this subject, as well as the more technical work of sewing, dressmaking, and millinery. A selected bibliography of these subjects will be added later; much help and information may also be gained from current magazines, reports of associations, etc., all of which will help the teacher in the field to keep in touch with the latest ideas and movements.

ASSOCIATIONS AND THEIR REPORTS

The annual reports of the following associations are of particular help and can be had by becoming a member of the associations, or by buying them from the secretaries of these associations:

(1) National Education Association. Membership $2.00. Irwin Shepherd, Winona, Wis. General educational papers of the annual meetings are published in this report. All are of help, the reports of the sections on trade and industrial work especially.

(2) Lake Placid Conference on Home Economics, Lake Placid Club, Essex County, N. Y. Annual report of papers read at yearly meeting, also of the teachers' section, a mid-winter conference. These are of particular value to teachers of domestic art and science. (This conference ceased with the organization of the American Home Economics Association in January, 1909. Back reports are of much help.)

(3) American Home Economics Association, membership $2.00; includes journal published bimonthly, Teachers College, New York. Of interest to all classes of workers in the field of home economics.

(4) Public Education Association of New York, 105 East Twenty-second Street, Room 520.

(5) Society for the Promotion of Industrial Education. Literature may be obtained from Mr. Jas. C. Monaghan, Secretary, 546 Fifth Avenue, New York City.

(6) Eastern Manual Training Teachers' Association.

(7) Western Manual Training and Drawing Teachers' Association.

(8) Consumers' League. Reports of national and New York City Leagues may be obtained on application at office, 105 East Twenty-second Street, New York City. The aim of this league is to improve conditions of working women and children as to hours, wages, etc.

(9) Woman's Municipal League of New York, 19 East Twenty-sixth Street. Bulletin 50 cents per year. A society interested in civic improvements.

OTHER PUBLICATIONS

I. *Magazines:*

(1) "Teachers College Record." $1.00 per year. Address "Teachers College Record," Columbia University, New York. Devoted to discussion of educational problems.

(2) "Elementary School Teacher." Published by University of Chicago Press, Chicago. $1.50. Devoted to discussion of all phases of work of the elementary school.

(3) "Manual Training Magazine." $1.50. Published bimonthly by Manual Arts Press, Peoria, Ill. Devoted to discussion of industrial-arts subjects.

(4) "The Survey," formerly "Charities and the Commons." $2.00 per year. Published by Charity Organization Society, Twenty-second Street and Fourth Avenue, New York City. Deals with problems relating to the education and improvement of the poor. All interested in philanthropic work and social advancement will find this of great value.

(5) "The Craftsman." $3.00 per year. Published by Gustav Stickley, 41 West Thirty-fourth Street, New York City. Of help along art lines. Many suggestions for interior decoration and design.

(6) "The School Arts Book." $1.50 per year. Published by Davis Press, Worcester, Mass. A practical magazine for the elementary and high school, with many suggestions for applied design, and many articles of value to the domestic-art teacher.

(7) "The House Beautiful." $1.75 per year. Suggestive for those interested in the crafts and interior decoration.

(8) "The Ladies' Home Journal." $1.50 per year. Published by Curtis Publishing Company, Philadelphia.

(9) "The Woman's Home Companion." $1.25 per year. Many suggestions in art needlework, sew-

ing, and dressmaking. Published by Crowell Publishing Company, New York City.

(9) "Good Housekeeping." $1.50 per year. Published by Phelps Publishing Company, Springfield, Mass. Articles of interest in relation to dress and good housekeeping generally.

(10) "The Outlook." $3.00 per year. 287 Fourth Avenue, New York City.

(11) "The Educational Review." $3.00 per year. Published by Educational Review Company, Columbia University, New York City. Devoted to discussion of topics of general interest in educational field.

II. *Government Reports:*

United States Department of Agriculture:

(1) "Farmer's Bulletins." Free distribution with some exceptions. Address, Division of Publications, Washington, D. C. Of great value to students of domestic art and science. Many papers on wool, silk, cotton, sheep, etc., of value in study of textiles.

(2) "Annual Reports of the Department of Agriculture." Division of Publications, Washington, D. C. Textile crops and experiments are treated in these reports, as well as other agricultural reports.

(3) "Reports of the Smithsonian Institute," Washington, D. C. The reports on ethnological subjects of value in study of primitive life, industries, and textiles.

(4) "Reports of the Commissioner of Education," Department of the Interior, Washington, D. C. These are issued every few years, and are of great value to students of education in general, or of particular fields.

(5) "Reports of the United States Commissioner of Labor," Washington, D. C. Of value to those interested in problems of economics, the wage-earner, etc. Some of the back numbers are of great interest and value, especially on technical and industrial education.

III. *Foreign Publications:*

"Reports of Dr. M. Sadler for the English Government." Volumes X and XI are devoted to his Study of American Education. Volume IX, German Education. May be obtained from G. Seiler, 1228 Amsterdam Avenue, New York City. Price 80 cents each. Of value to those wishing to study the system of schools of the United States comparatively.

"Report by Alice Ravenhill on the Teaching of Domestic Science in the United States." Commissioner for Board of Education of Great Britain, 1905, 374 pages, price 75 cents.

IV. *Publications of the American School of Home Economics:* M. Le Bosquet, Director, 610 West Sixty-ninth Street, Chicago. Correspondence courses

for home-makers, teachers, social workers, and for institutional managers. Special text-books and library facilities.

V. *Books:*

A small selected bibliography will be added at the close. To keep in touch with new publications, consult lists of new books added to respective public libraries. Send to the leading book-publishing concerns for their monthly lists of new publications, especially along educational lines. Notice the advertisements of new books in the back of the current educational magazines suggested above.

VI. Publications of some of the textile schools and associations are of value in study of textiles.

"National Association of Wool Manufacturers' Quarterly Magazine," devoted to the interests of the National Wool Industry. Office, 683 Atlantic Avenue, Boston, Mass.

The New England Cotton Manufacturers' Association, International Trust Building, 45 Milk Street, Boston, Mass.

Draper Company. "Cotton Chats." Published by Secretary, Hopedale, Mass.

Lowell School publications.

VII. Catalogues of new schools, giving domestic art and science subjects, may be suggestive, or those

of old schools of note, that are constantly adding new subjects of interest along these lines.

Another means of keeping in touch with progress in this field is by attending the annual meetings of the educational associations mentioned. Much inspiration may be gained in this way. School exhibits are also of great help, and the educational divisions of State fairs or expositions furnish many suggestions. The teacher of domestic art must be alert and alive to all progress of events about her. Clubs of teachers interested in domestic-art subjects may meet for discussion and much benefit be derived if the meetings are conducted seriously and systematically.

PART II

DOMESTIC ART IN THE ELEMENTARY SCHOOL

CHAPTER VIII

DIVISION OF SUBJECT-MATTER FOR THE ELEMENTARY SCHOOL

Some line of domestic-art work may be presented in every grade of the elementary school. As it is generally placed in the school curriculum it means sewing and its allied subjects, or often sewing alone in the fifth, sixth, seventh, and eighth years of the graded school.

Constructive work now given in nearly every grade.

Some constructive work of an industrial nature is now generally given in all grades of the elementary school. Arguments for its introduction have already been given. Froebel in the kindergarten has presented theories that may well be advanced along higher lines of education. Hand-work and doing

are the keystones of the kindergarten work. The paper-cutting, pasting, sewing, clay, all the various occupations are avenues for self-expression as well as the gifts, songs, and games which furnish further opportunity for doing and thinking, or the self-activity of the child.

When the child enters the kindergarten and begins his school career, he faces the accumulation of the knowledge of the world. All this is his inheritance to which he has a right. The work of education is to bring the child to his rightful possession of this inheritance, and the work of the school to plan it in such a way that the school as one institution of society may do its share in bringing about this education. The kindergarten is the first stepping-stone and through its various lines of work—games, songs, stories, gifts, and occupations—opens to the mind of the child in a simple way some of the wonders of nature and of this complex world. The point of contact is the home and the teacher leads from this to the world of thought and action about the child. Most of the interpretations are through doing, and gradually the child is led to a comprehension of some of life's complexities. One may say that domestic art almost begins in the kinder-

garten in a most simple way. Sewing and use of the needle is one of its occupations. Furnishing of a doll's house with paper furniture, rugs, curtains, etc., is often undertaken, and simple talks in the morning circle on textiles, as wool, silk, linen, and cotton, often introduce the child to this field of thought. Paper and rag weaving also furnish another occupation and so we may trace the beginnings of domestic art from early to higher education. Here, it is hand-work and only one of the many kinds presented to little children who need change and variety. The transition from kindergarten to early grade work is often fraught with danger because the transition to more formal work is not more gradual. Hand-work and domestic art as one branch of it should still continue and advance with the child, offering new interests and difficulties and helping to lead him to an interpretation of some of the many wonders in the industrial world about him.

Hand-work in the elementary school has been presented in many different ways. There have been almost as many approaches as there are districts or localities for its introduction. Hand-work as the term is now generally used in the elementary

schools means the various lines of hand-work as introduced in the first four grades of the elementary school. From the fifth grade up, the hand-work subjects are called specifically cooking, sewing, etc., for the girls, and other lines of work, as wood-working, wood-carving, etc., for the boys. All of these subjects are of an industrial or household arts nature.

Many methods of approach in planning hand-work for the lower grades.

The industrial work of the lower grades may include many lines of domestic-art thought, but should not be confined to these subjects. The ideals of the school or the plan of the curriculum of each grade will determine largely what and how much the teacher can present. In the presentation of certain lines of thought, the media of clay and wood may more fitly be expressive than some line of domestic art, as sewing, weaving, or spinning. Hand-work as it is now given in the schools is approached from several points of view. Some claim that the so-called neighborhood approach is the only way, and work along lines which make the child's immediate needs and interests the centre or basis for planning. Others claim that the organization of hand-work in

Industrial work in lower grades not to be confined to domestic-art branches.

the lower grades should be planned along the lines of social or racial development, and beginning with the study of the activities of primitive people trace their advancement through the different eras of civilization, pastoral, agricultural, handicraft, and factory eras. Another thought is that the child should become acquainted with the essential processes of manufacture in the principal fields of modern industry and that this industrial knowledge may be presented partly through work with the hands, but not entirely so. This curriculum should be worked out by the grade teacher or head of the school so that there may be as much unity of thought as possible and much saving of time. With the development of this thought may come a simplified curriculum. With the present stress put on vocational training, the domestic-art phases of vocational work for girls in the upper grades would be based on this lower grade study of the essential processes of the leading fields of industry. The girls would thus have a knowledge of the textile field of industry and the processes in the industries of spinning, weaving, knitting, garment-construction, and sewing.

In some schools the hand-work is apparently introduced in a hit-or-miss sort of manner, simply

because it is hand-work or something for the children to do and it is required by the controlling board. This is the "fad" so often objected to and rightly. This aimless hand-work may be better than none and undoubtedly is where it has a certain utilitarian value, but there is scarcely any excuse for its being when it is possible to present it in such a way as to connect the thought of the development of industries with it, whether the approach be from the neighborhood point of view or along certain lines of primitive life and industries. In the first four grades of the elementary school many lines of industrial thought may be given, to which the domestic-art branches contribute quite a number. Little children need change and variety, and the boys and girls may be taught together during these early years. There is every opportunity for originality and versatility as the teacher works out her course of study. This often falls to the domestic-art supervisor, but more often to the supervisor of manual training. The course of study should be worked out in connection with the general curriculum and in consultation with the grade teachers and head of the school. With more ideal organization the develop-

Hand-work may be a mere "fad."

ment of industrial thought may be a part of the work of the regular grade teacher and the constructive hand-work phases of the work be given by her also.

The following outline may be suggestive of the many lines of work from which choice may be made in carrying out one's plans. If, for instance, the first-grade children are to have home life and its surrounding occupations for the central thought, many of the various lines might be used. In planning and furnishing a doll's house in a simple way, painting, papering of the soap boxes, simple furniture, sewing of curtains, bedding, etc., give opportunity for expression along many different lines. A study of primitive Esquimaux life, on the other hand, might require clay, for making the animals and dogs, men, etc., wood for the sleds, and simple sewing for the garments representing fur. At the same time there may be begun the study of the modern industrial processes. These lines of work give to these little people an introduction to the great fields of industry of wood, clay, food, and textiles. Metal is too difficult for use in the lower grades. The approach which shall be followed must be decided by each school and worked out along lines most in keeping with the ideals of that school. Each teacher must choose the

lines of work best adapted to help in presenting the new ideas to the children and those fitted to be of value in developing the child. This last, however, is more largely a question of method than of selection of subject-matter.

WORK FOR LOWER GRADES

Painting	Coarse sewing
Drawing	Dyeing, weaving
Paper cutting and folding	Clay modelling
Pasting	Cardboard
Simple woodwork	Use of sand table
Stencilling and block printing	Cooking

Selections should be made from these and adapted to the children in carrying out the general thought of the grade and in the planning of the course of study for the lower grades.

These general lines of work include the domestic-art subjects, which may be outlined more in detail as follows:

DOMESTIC-ART SUBJECTS FOR THE ELEMENTARY SCHOOL

The following subjects for all grades of the elementary school may be considered for selection in the planning of work, regulated by age, grade, needs

of locality, cost, ideals, relation to school study, needs of home and schools, etc.:

(1) Articles of many varieties may be made by the use of the following stitches: Basting, running, stitching, back-stitching, overhanding, hemming, blanket stitch, simple embroidery stitches, as Kensington, cross, chain stitch, feather stitch, hemstitch, couching, French knots, etc.

(2) Seams—plain seam, French, and flat fell.

(3) Patching—hemmed, overhanded, flannel; and Darning—stocking darning, damask, and cashmere.

(4) Button-holes, plackets, putting on bands.

(5) Simple embroidery: use of stitches—chain, catch, Kensington, feather, etc.; initials—embroidered, appliqué; couching, etc.

(6) Textile work: weaving, study of materials, evolution of textile industry, properties, uses, dyeing, etc.

(7) Cost of clothing: cost of dresses and trimming; regulation of cost.

(8) Care of clothing, repairing, cleansing; color of clothing; hygiene.

(9) Household art: decoration, furnishing of rooms, color-work, design.

(10) Simple garment-making (under certain conditions).

(11) Co-operation with grade work in history, arithmetic, English, art, geography, etc., wherever it can be done with service.

DISTRIBUTION OF DOMESTIC-ART SUBJECT-MATTER FOR SELECTION AS PART OF THE ABOVE WORK FOR LOWER GRADES

Grades 1 and 2

(1) Making of simple articles, in keeping with underlying ideals of the school and grade. Blanket stitch on canvas, running, basting (applied to articles).

(2) Simple textile study, including dyeing, weaving, and simple comparison of textiles.

(3) Care of clothing.

(4) Furnishing of doll's house.

(5) Christmas gifts.

Grade 3

(1) Making of simple articles in keeping with underlying ideals, using following stitches: Blanket, cross, running, basting, chain, and stitching stitch.

(2) Continuation of textile study—simple evolution of spinning and weaving. Comparison of textiles.

(3) Care of clothing.

(4) Designing of letters and other designs, according to articles selected.

(5) Christmas gifts.

Grade 4

(1) Making of simple articles in keeping with underlying ideals, using following stitches: Hemming, couching, overhanding, two runs and backstitch, in addition to stitches in Grade 3.

(2) Designs made for articles; color-work; designing pillows and table-spreads for appliqué.

(3) Doll dressing; free cutting of patterns.

(4) Christmas gifts.

(5) Simple crocheting and upholstery.

Crude work along all these lines should be expected from young children, but the teacher should not be surprised if occasionally she receives unexpected results. An occasional child will contribute something far beyond those of average ability, but under no circumstances should the children be forced to do fine or accurate work.

By the time the fifth grade is reached greater accuracy should be expected and demanded along any line of hand-work pursued. If it is not demanded at this time, the pupils will form slovenly habits of action which are not likely to be corrected later. At this point the hand-work may be divided, the girls receiving instruction in sewing and cooking and the allied subjects, and the boys in woodwork, metal, etc. If the plan is to introduce vocational work in the seventh, eighth, and ninth grades, then

the first six years may be planned with this idea in view. Plans for courses of study in the grades will be discussed in another chapter on the factors involved in planning a course of study.

DISTRIBUTION OF DOMESTIC-ART SUBJECT-MATTER FOR SELECTION FOR THE FIFTH, SIXTH, SEVENTH, AND EIGHTH GRADES

Grade 5

(1) Making of simple articles, using stitches previously learned as review, and in addition: cross stitch, feather stitch, and Kensington stitch.

(2) Designs for articles made.

(3) Doll dressing (costumes of particular study or for modern garment-construction).

(4) Textile study; weaving of rugs as co-operative work, in order to learn parts of loom.

(5) Christmas gifts.

(6) Simple embroidery.

Grade 6

(1) Making of articles, using stitches learned in grades below, and in addition: French seam, placket, and putting on band, button-holes, and stocking-darning.

(2) Textile study—comparative study of wool, cotton, silk, and flax, applied to purchase, use, etc., of articles made.

(3) Designing for articles.

(4) Clothing—best and most healthful kinds.

(5) Christmas gifts.

(6) Simple embroidery.

(7) Biography of textile inventors—Eli Whitney, Arkwright, Crompton, etc.

(8) Simple machine-work (where circumstances would necessitate the child's leaving school at end of elementary school course).

(9) Simple knitting.

Grade 7

(1) Making of articles using work of other grades in review, and in addition: button-holes, herring-bone and feather stitch.

(2) Simple embroidery.

(3) Christmas gifts.

(4) Textile study: discussion of early industries and evolution of their manufacture.

(5) Economical buying and cutting of materials.

(6) Design—in relation to things made.

(7) Simple machine-work (where circumstances would necessitate the child's leaving school at end of elementary school course).

(8) Crocheting of articles.

Grade 8

(1) Making of articles, using stitches previously learned.

(2) Repairing, patching, and cleansing of garments.

(3) Making simple garments.

(4) Simple embroidery: towels and table linen—initials, hemstitching—doilies.

(5) Textile study: quality, width, cost of materials.

(6) Study in color and design applied.

(7) Christmas gifts.

(8) The home—furnishings, order, beauty.

(9) Discussion of the relation of the girl to factory life, sweatshop labor. Consumers' League, etc. Development of social consciousness.

The subject-matter suggested for Grades 6, 7, and 8 may be too advanced for some localities and not sufficiently so for others. This should be adjusted to suit needs and would also depend on how many years may be devoted to domestic-art study.

References for Study

"A Sewing Course," Woolman. 1910 edition.

"Teachers College Records." November, 1901; January, 1906; September, 1906; January, 1907; May, 1907.

Courses of Study of Public School Systems.

"The Place of Industries in Elementary Education," K. E. Dopp.

"The School and Industrial Life," James Earl Russell, "Educational Review," December, 1909.

CHAPTER IX

THE FACTORS INVOLVED IN PLANNING A COURSE OF DOMESTIC-ART WORK FOR THE ELEMENTARY SCHOOL

The relation of domestic-art subject-matter to general education.

BEFORE a teacher can decide what is the most valuable and profitable domestic-art work for the children in her charge, she must fully comprehend what is meant by the many lines of thought which go to make up that mass of subject-matter. Then, too, she must understand the conditions or factors which will most assuredly affect her selection of material. The subject-matter of domestic art has been fully discussed in previous chapters. The child has a right to his inheritance and the possessions of learning which have come down to him from past ages, from the fields of literary, religious, scientific, institutional, and æsthetic learning. The institutions of the home, church, state, school, and society must interpret these riches to him and develop all sides of the

child's nature. When we examine the many branches to which he is heir, we discover that the field of scientific and æsthetic learning, which may be interpreted partly through doing, is not the least part of his rightful inheritance, for the power to do and act is surely the indication of a liberal education. Domestic art is one phase of the "doing" inheritance which comes to our girls and but a small part of the full inheritance to which they have a right. Teachers of this subject so often feel and act as if domestic art were the whole curriculum and do not see its relative importance. It must be given its proper amount of time, but not to the neglect of other studies, and in selecting the best subjects from this field of work for her class, the teacher must know not only what the possibilities of subject-matter are, but must see their relation to the broad field of education and the factors which will naturally affect the choice of material. As subject-matter has previously been discussed, we may turn to consider the factors involved in selection.

The child.

The teacher must know something of the physical and psychological nature of the child before her. If she understands the physical nature, she will be careful to adapt her work to

the physical development of the child. There will be no demand for fine results where there is not the development of the proper co-ordination of muscles to make the fine adjustments. The defects of eyesight and any physical troubles will be noted and the work planned accordingly. In schools for defectives, this would be a very important factor in planning any course. The psychical nature must also be considered; the laws governing interest, memory, apperception, habits, etc., if understood, will be a guide to the teacher in selecting, planning, arranging, and presenting the course of study.

Locality and environment.

The environment and locality will most surely affect and influence the planning of a course. Is it fair to suppose that work planned to be of value and meet the needs of children in a district school will be appropriate or of most value to children in a select private school or in the Chinese or Italian quarter of a public school system of a large city? So each course must vary to meet the needs of the children for whom it is intended. The industries of the locality, the peculiar conditions of the pupils, environment at home and at school, all are factors in determining what the choice of subject-matter is to be. Each locality with its par-

ticular environment is a law unto itself and must be handled so.

Not all schools are free to spend the requisite amount for the introduction of domestic art or science. Some teachers are privileged to expend twenty-five cents per child per year, and others are sometimes hampered by an allowance of a few cents. If a teacher is versatile and ingenious she will be able to get the very best results with the money allowed. Sometimes the children may furnish certain materials, or often they may be obtained by soliciting from dry-goods houses odds and ends, samples of materials, etc., all of which can be utilized in some way. The money allowed by a board or system of education, if a small amount, need not necessarily hamper the work. Although the amount granted does necessarily enter as a factor in the planning, and does sometimes regulate the amount of time to be devoted to the work, it need not be the means of producing a poor course if the teacher be ingenious. It is far more economical for a board to employ a well-trained, ingenious woman than one who relies on a definite sum of money in order to get certain results. Time enters here as a factor in planning. The arrange-

Cost of the work and time allowed for it.

ment of the course of study will naturally be affected by the number of minutes or hours per week to be devoted to the subject and the cost regulated somewhat by this allowance.

Influence of head of the school on domestic-art curriculum.

The planning of the course of study is again affected by the ideals of the head of the particular school where the work is to be given. Perhaps the teacher may not be given the freedom to plan and correlate her work with that of each grade, and again unjust demands may be made by the head which may not be in keeping with the right ideals for domestic-art work. This problem must be handled tactfully by the teacher, and she must plan so as to get the best possible results under the particular conditions. The teacher may believe that in the lower grades the best approach for the hand-work is from the neighborhood side, while the head of the school may be deeply interested in industries or primitive life. The teacher may wish the work of the upper grades to prove of use in making girls better home-makers, and the head may not feel the utilitarian value. The aim of each particular elementary school will surely differ, and the domestic art should conform to the aims. The aim of some ele-

mentary schools is to send their boys and girls on to high school to continue their education, while others realize that the children of their particular locality are forced to labor when the elementary course is completed or even before, and must be given all the possible help during that short period. When the domestic-art teacher realizes the different aims, she will plan her work so as to give to each group that which will be of greatest value as each proceeds into business or higher school work. This may often mean the introduction, for instance, of machine-work quite early in the grade school, perhaps in the sixth or seventh year.

Vocational tendencies must be considered.

The introduction of vocational work into the upper grades of the elementary school is one of the difficult problems which those dealing with the courses of study must face in the near future. The readjustment must surely come, considering the large percentage of children who drop out of school at the close of the elementary school and before, and those who continue their high school training for a short period only—for one or two years. The plan proposed by the City Club of New York for the readjustment of the years of study in the New York

public schools is a very interesting one and if ever adopted will prove of interest to those studying the development of education. The plan is to divide the twelve years of study (eight elementary and four high school years) into three parts:

(1) Six years of elementary school work.
(2) Three years of lower high school.
(3) Three years of upper high school.

The majority of children might then continue through the ninth grade instead of leaving at the end of the eighth, a gain of one year, the main reason being to drop out at graduation from the eighth grade. Few children have reached the compulsory school age by the end of the sixth grade, so that the temptation to drop out then would be slight. In the lower high school or what would be the seventh, eighth, or ninth grades would lie the opportunity for the introduction of trade courses, the ninth grade offering both trade courses for those who must drop out and also regular high school subjects as at present for those who will continue. This scheme is worthy of study and has been tried with excellent results in some parts of the Middle West. This possible introduction of the vocational work as

early as the seventh grade would mean the readjustment of the domestic-art course of study, or those trades centring in the needle.

The social aspect of work should also govern the domestic-art teacher in her plans. She should know the home needs and conditions of her particular children and should see the connection that it is possible to make with the school. There is a big question of economy of time right here. It is certainly not economical of the pupil's time for a teacher to present those things, for instance, which the child may be learning well at home. Again, greater interest is taken if the problems to be made are of value in the home or fit into the school needs of the children. The social needs of the locality may afford opportunity for the children to be of help and assistance to the hospitals, asylums, etc., by furnishing certain work for these institutions. In institutions of various types the needs may be so great as to furnish occupation for all the domestic-art pupils. These and other social aspects should determine the teacher's plan of action.

The social aspect.

The question arises very often, who is to direct this work—a trained specialist, or shall it be left to the grade teacher to work out under the direction of

the head of the school? The answer to this question surely enters as a factor in the planning of the hand-work for the lower grades and the household-art work of the upper grades. The trained specialist is needed to see the breadth of the field and to make the proper connections, but with training the grade teacher may be able to give the industrial work of the lower grades.

Who is to direct the domestic art?

With these numerous factors before us as influencing our plans and a good understanding of the field of subject-matter of domestic art, there should be no difficulty in planning a good course of study. The question so often arises, what is the best thing to present, what shall I give to my children? It is easily answered. One cannot give all of the subject-matter as outlined, but one can choose from it that which will be of the greatest possible help to the group under one's care.

What shall be presented?

There is another thought for consideration in the planning of the course of study—shall that course be a mere formal presenting of a number of problems or shall it have the thought content which is to make it of greater value?

Shall it be merely problems or problems with thought content?

There are two kinds of domestic-art teachers, those who teach only sewing or its related subjects and those who feel and present the thought content in which this field is so very rich. The one teacher is cut and dried—the other type, ingenious, versatile, quick, and alert. She can accomplish much with little means because of the richness of this field of thought which she knows. Her main aim is the child, the good of the child or girl, to give that which is of most value to her in this phase of her education. This content of the thought side of the work has already been discussed under the analysis of the subject-matter. The following outlines may be suggestive for domestic-art courses, and serve to show the underlying thought content, the relation to local conditions as well as the possible relationship to other grade work. Outline II gives only the domestic-art phase of the industrial work for the lower grades.

OUTLINE I

Student Plan

Course of Study for Grades 1–4, illustrating the use of many lines of hand-work, of which sewing forms a part.

Local Conditions

Location.—Rural school in northern New York.

Instruction.—By grade teacher.

Time.—Twenty minutes daily for class work, but children will have spare time during session and outside of school hours for completing work begun in class lesson.

Materials.—The school board will furnish only drawing and manila paper. It is not interested in hand-work and will allow no appropriation for other materials. The people of the district have given no attention to the subject, so the teacher will have to interest the children sufficiently to have them contribute a little money for materials which will need to be bought, and to bring from home scraps of cloth, paper, etc., as they are needed in the work. The people are farmers and nearly every house will have abundance of pieces in the store-room. Most of them will also give the children a few cents at a time when they see them much interested. The teacher herself may have to contribute.

Number.—There will be about twenty children in the school.

Grouping.—Grades 1 and 2 will work together. Grades 3 and 4 will work together.

Aim

To form taste for home life, to arouse the æsthetic faculty, to broaden the outlook on life.

Subjects

Drawing.—Usually on Tuesday and Thursday. Preceding Christmas the days may be changed to accommodate the kind of work being done. Paper furnished by school board, colored crayons and pencils by the children.

Hand-work.—Remaining three days.

Sand table.

Paper-folding, cutting, construction.

Simple sewing and weaving.

Grades 1 and 2

Furnishing doll's house

The greatest possible economy must be used, therefore scraps of material which children can bring from home—without expense to family—must be utilized. All the furniture will be made from manila paper, the children varying the style of chairs, etc., according to the rooms and their original ideas.

Scissors, needles, thread, thimbles will be brought from home.

September

Drawing.—Grasses and fall flowers—attention given to direction and character of growth.

Sand table.—Lay out farm—hills, meadows, fields, pasture, orchard, pond or stream, sites for house, barns, etc., fences, rail and wire (thread can be used for wire, twigs for rails and posts).

House.—A good-sized box will be found either at the school or among the farmers. Partitions can be put in by older children or teacher.

Plan rooms.—Downstairs—parlor, dining-room, kitchen; upstairs—two bedrooms.

Paint.—Outside.

Inner walls.—Kitchen—paint—why? Other rooms—paper. Children can bring remnants of wall-paper from home. Discuss color, style, etc., most suitable to each room. Children can select from papers brought. Use either entire pattern or selections as best adapted to rooms.

Floors.—Kitchen—paint—easily cleaned. Other rooms—stain. Paints and stain will probably have to be bought.

OCTOBER

Drawing.—Fruits, vegetables, autumn leaves—work for pleasing arrangement.

Furnishing of House.—Each child can make every article. What are necessary may be given to the house, and the others taken home. Those giving to the house may make a second for themselves.

Kitchen.—First, because most important room in farm-house. Chairs, table, cupboard—fold, cut, paste—cut legs, doors. Stove—use black paper if possible; if not, mark for lids and doors. Roll paper for pipe.

Dining-room.—Chairs. Table.

NOVEMBER

Drawing.—Vegetables, Thanksgiving subjects and illustrations. Design borders for rugs.

Sideboard for dining-room.

Rugs.—Weave square mat from kindergarten papers. Plan rugs—colors for different rooms, borders on ends, materials.

String small piece of cardboard with holes for kitchen rug.

Warp—heavy thread or yarn.

Woof—rags.

Sand table.—Story of Pilgrims—sea, rocky shore, Plymouth Rock, snow-covered land, forest, ship on sea, etc.

DECEMBER

Drawing.—Christmas subjects and illustrations.

Rugs.—Large for floors of all rooms except kitchen.

Looms.—Four strips of wood—tacks to hold warp threads. Sticks and tacks can be found in any country home—older children can nail them.

Dining-room.—Rags brought from home for this rug.

Parlor.—Some children will have macramé cord at home, if not, buy. Use for parlor rug.

Bedrooms.—One of rags, one of cord.

String looms.—Weave—the rugs for the four rooms can be divided among the children according to the suitableness of the material they bring.

Christmas gifts.—Sachet bag—kindergarten weaving papers—cotton filling—powder.

Calendars.—Cardboard with holly design—tiny calendar pasted on—tie with red ribbon.

Toy Christmas tree.—Spool for standard, green tissue paper for trunk and leaves.

School Christmas tree.—Colored paper chains.

JANUARY

Drawing.—Christmas scenes, stories, and gifts. Winter games and sports.

Doll House.—Bedrooms.—bedsteads, chairs, washstands, bureaus, one cradle.

Mattresses.—Pillows—heavy cotton cloth—fill with cotton batting—running stitch.

Talks on cotton plant and manufacture.

Sheets.—Fine cotton—run hems.

FEBRUARY

Drawing.—Illustrate stories—subjects relating to Lincoln and Washington.

Doll House.—(1) Pillow cases.—Fine cotton—run hems—care of mattress and pillows.

(2) Blankets.—White flannel from home—blanket stitch in mercerized cotton or yarn as children may have.

Care of blankets.

(3) Wool.—Growth, manufacture.

(4) Comfortable.—Cheesecloth—blanket stitch edges—tie.

Valentines.—Make simple valentines from drawing-paper and colored paper for decoration.

MARCH

Drawing.—Illustrated stories—objects of the season, kites, etc.

Doll House.—Bureau scarfs and washstand covers fancy muslins—run hems.

Parlor.—Chairs, table, couch.

Couch cover.—cretonne, denim, canvas, etc., as children may bring. Blanket stitch on edge.

Cushions.—Bits of silk, denim, cretonne, etc.—fill with cotton—running stitch.

APRIL

Drawing.—Spring growths—catkins, pussy-willows, etc.—Easter lilies, rabbits, etc.

Doll House.—Window curtains for whole house—fancy muslin or net as children may wish.

Table cloth and napkins.—Linen from home—run hems. Use and care of.

Talks on flax and linen.

MAY

Drawing.—Spring growths—leaves, flowers.

Sewing for homes.—Napkin ring—canvas—blanket stitch edge.

Dust cloth—cheesecloth—turn—baste—run—proper use of.

Hair receiver—canvas—blanket stitch edges.

JUNE

Drawing.—Flowers.

Drawings of April, May, and June made on sheets of uniform size—tie together—children design cover.

Sewing.—Dish towel—turn—baste, run—care of.

GRADES 3 AND 4

FOREIGN HOMES: INDIAN, ESQUIMAU, JAPANESE, TROPICAL

SEPTEMBER, OCTOBER, NOVEMBER

Indian Life

Drawing.—Plants with flowers or seeds.

Relative position and size of parts.

Autumn leaves, fruit, vegetables—good arrangements.

Thanksgiving subjects and illustrations—proportion and grouping—objects from Indian life.

Sand table.—Indian village—forest—make wigwams—coarse canvas or bark—decorate with juice from berries.

Bows and arrows—feather arrows.

Dug-out canoe.

Birch-bark canoe.

Snow-shoes.

Cradle-board.

Quiver.

Moccasins.

Make and dress Indian doll—heavy cotton for body—stitch—fill with sawdust—trousers, coat, headpiece—running stitch.

Weave Indian blanket—yarn—heddle.

DECEMBER–JANUARY

Tropical Home

Drawing.—Christmas illustrations, games, gifts, stories. Life in tropical homes.

Sand table.—Palm trees—green and brown tissue papers.

Huts—sticks wattled with raffia or hay.

Weave mats of straw for roofs.

Raffia braided mat.

Hammock of cord.

Christmas gifts.—Button bags—denim, canvas, cretonne, as children may have—stitch sides, run hem at top—may put on design in chain stitch.

Picture frame—cardboard with raffia wound over it.

Calendar—similar to those in 1 and 2.

School Christmas tree—bell forms marked, cut, strung, red tissue paper.

Lanterns—red paper.

FEBRUARY

Esquimau Home

Drawing.—Winter subjects—Lincoln, Washington—Make cover for a Lincoln-Washington book—make a single valentine.

Sand table.—Esquimau village—rock-salt for snow. Dress Esquimau doll in bits of fur—sled of wood.

Sewing.—Dust cloth—turn, baste, cross-stitch—proper use of.

MARCH

Japanese Home

Drawing.—Appropriate to season—attention to grouping—Japanese objects—lantern, parasol, fan, etc.

Sewing.—Make kimono for doll—seams, running, hems, chain-stitch.

Iron-holder.—Denim, cretonne, etc., as children may have. Baste edge of each side—fold and baste interlining. Baste edges together. Blanket stitch edge.

APRIL, MAY, JUNE

Drawing.—Spring growths. Easter cover for nature book.

Sewing.—Hand towel—linen—turn, baste, run hems. Care of. Talks on flax and linen.

Bean-bag—heavy cloth—stitch.

Textile charts.

Window racks and plant sticks.

COST OF MATERIALS NOT BROUGHT FROM HOME

Grades 1 and 2

Colored crayons (10 cents a package)	$1.00
Paint and stain	.50
Kindergarten weaving paper	.20
Macramé cord	.10
Sachet powder	.25
Calendars	.10

Cardboard calendars	.05
Ribbon	.10
Tissue-paper—green	.02
Paper for tree chains	.05
Total	$2.37
Per child	.23½

Grades 3 and 4

Colored crayons	$1.00
Raffia	.20
Cord	.20
Calendars	.10
Tissue paper	.05
Valentine paper	.10
Cardboard for calendars	.05
Ribbon for calendars	.10
Total	$1.80
Per child	.18

NOTE.—The above plan of student's work illustrates what can be accomplished with little money.

OUTLINE II

Student Plan

New York City Free Private Grade School.—General course parallel to public grade school.

Locality.—Poor neighborhood—most of the children go to work at the end of the elementary school.

General Aim.—To connect with the home and neighborhood to raise the standard of living.

Some Ideas which Control the Course of Study

Grade I (*fifty minutes per week*)

(1) *Some underlying ideas.*—Home life and surrounding occupations.

Fall.—Farm life. Sand-table work. Houses, barns, sheds, fences, wagons, farm-animals. Materials of many kinds used.

Farm life. A link extending to grocery, bakery, dairy, meat-market.

Winter.—Study of a typical home of the neighborhood (apartment). Drawing, block-building, furnishing a play-house, activities of the home, dusting, cleaning, care of clothing. Care of play-house and some care of schoolroom furnishings.

(2) *Clothing and shelter.*—In relation to activities of home. Emphasize care of clothing; materials of which clothing is made: cotton, silk, flax, wool. Where comes from (very elementary discussion of relation between plant or animal and finished product).

(3) *Some underlying ideas in carrying out following things to be made.*—Crude results are expected. The aim is to make the child as creative as possible through use of principles taught.

(*a*) Paint cloths—basting.

(*b*) Canvas work—blanket and running stitch, napkin ring, etc.

(*c*) Cord work.

(*d*) Making of simple articles for play-houses—bedding, curtains, table covers, etc.

(*e*) Farm life:

(1) Basket.

(2) Meal bag.

Grade II (fifty minutes per week)

(1) *Some underlying ideas.*—Home life and surrounding occupations. Comparison with lives of primitive people.

Fall.—Farm life as related to our fall activities in the home. Farm visited, fruit gathered and preserved for winter. Fall housekeeping problems.

Winter.—In place of a play-house, a "real" room (rest-room or living-room, third floor) to be partially furnished and cared for.

Esquimau children's activities, those of early man and American Indian, compared with our lives.

(2) *Clothing and shelter.*—Comparison of clothing of primitive and modern people; of what made; how; tools used; names of materials—bark cloth shown; practice in elementary spinning and weaving. Care of clothing at home. Practical work in simple household decoration.

(3) *Some underlying ideas in carrying out things to be made.*—To make the child creative through the use of ideas and principles taught.

(*a*) Paint cloths—basting.
(*b*) Canvas needle-book.
(*c*) Pin-cushion.
(*d*) Christmas stockings.
(*e*) Iron-holder.
(*f*) Bean-bags.
(*g*) Fitting up sitting-room (co-operative work).
(*h*) Overshoe bags.
(*i*) Weaving.

Grade III (*One hour forty minutes*)

(1) *Some underlying ideas.*—Study of neighborhood occupations. Comparison with some primitive people.

(*a*) Farm life. More intensive study. Dairy farm; truck-garden; cultivation of fruits and cereals.

Large distribution centres—milk-depots; beef storage house; freight station; wholesale vegetable market.

(*b*) Comparison of modern agricultural and pastoral methods with those of Eastern shepherd and Pueblo Indian.

(*c*) Beginnings of local history.

(2) *Clothing and shelter.*—Relation of farm life to clothing. Comparison with that of Eastern shepherd and Pueblo Indian. How and where made. Simple processes of spinning and weaving in advance of the second grade. Use of heddle and other tools in evolution of these arts. Local history in relation to arts of spinning and weaving and production of clothing. Care of clothing.

(3) *Some underlying ideas in making of following articles.*—Relation of things made to home and school interests. Creative side of child nature to be developed; care in threading of needles, position, thimble, knotting thread.

(*a*) Needle-book—canvas.

(*b*) Hand towels—running. Emphasis on threading, knotting, holding needle.

(*c*) Paint cloths.

(*d*) Pin-cushions—canvas.

(*e*) Shoe bags.

(*f*) Paper dolls dressed.

(*g*) Textile chart: (1) Comparison of textiles, (2) adaptation to use.

Grade IV (*One hour forty minutes*)

(1) *Some underlying ideas.*—More definite study of New York City as a whole.

Main study: Some of the causes which led to its prominence and which tend to maintain it.

Some study of various nationalities represented here.

Some study of the commodities sent from other lands.

Stories of sea-faring people of long ago (in connection with navigation). Norsemen, Phœnicians.

New York architecture—buildings, bridges, streets.

Stories of Greece and Rome, suggested by a simple study of political city organization.

Housework—cooking, setting of table, care of rooms, care of clothes. Basis is found in trying to make the child his mother's "helper."

(2) *Clothing and shelter.*—Study of Greek and Roman dress. Arts of spinning and weaving as done in Greece and Rome; materials used.

Commodities for clothing sent from other lands. Production in New York—where—how.

(3) *Some underlying ideas in making following articles.*—To inspire child to be mother's helper in home. Special attention to proper use of tools in sewing; correct method of hemming.

(*a*) Paint cloths.
(*b*) Pinball (2 circles overhanded; initials in chain stitch).
(*c*) Hand-towels—hemming.
(*d*) Christmas gifts, penwiper.
(*e*) Clothespin bag.
(*f*) Cover slips for home work.
(*g*) Cushion top—design transferred—painted—couched.
(*h*) Stuffed animals for stitching stitch.

Grade V (*one hour a week*)

(1) *Some underlying ideas.*—The dramatic development of our country.

Discovery and Exploration.—Present geographical knowledge compared with that of people of the fifteenth century.

India, and the wonderful stories told about the East by the Crusaders.

Period of Colonization. (Up to the time of the quarrel with England.)

Typical colonies studied. New England, New Amsterdam, Southern Colony.

Biography. Brave men who helped build our country.

Housework.—Learning to be helpful at home, continued from Grade IV.

(2) *Clothing and shelter.*—How made—beautiful fabrics—simple tools. Columbus bartered for cotton. Materials and clothing in use in East. Herodotus's description of Indian cotton. Early travellers' story of cotton as animal. Biography: Eli Whitney, Arkwright, Hargreaves, Crompton, etc.

(3) *Some underlying ideas in making following articles.*—Creativity on part of child centring about helpfulness in home. More careful work required—neatness, accuracy. Correct position of body, tools, and work. Discussion of cost and

kind of materials used. Economy in buying and cutting. Care of materials and tools.

(*a*) Duster—cross stitch.

(*b*) Pinball (design in Kensington stitch).

(*c*) Christmas gifts.

(*d*) Laundry bag (feather-stitch).

(*e*) Doll dressing—simple notion of drafting and of garments in use.

(*f*) Furnishings for doll's bed.

Grade VI (one hour a week)

(1) *Some underlying ideas.*—The development of the nation to the time of the slavery troubles and the division of the Union.

Modern and immediate life remains the key-note here as in previous grades. The past is drawn upon to illumine the present. Problems of transportation, industrial development, and economic growth will be viewed from the stand-point of the present.

Literature will deal largely with stories of heroism and chivalry. History and literature will frequently, though not always, supplement each other. The mythical element still appeals to this age, and the myths and sagas of the Northland, the German tale, will be treated as carefully as will the purely biographical material. Lives of great men studied: George Washington, Benjamin Franklin, Daniel Boone, Alexander Hamilton, John Paul Jones, Thomas Jefferson.

Housework—Girls.

Shopwork.—Boys.

Geography of South America and Europe.

(2) *Clothing and shelter.*—Districts located where clothing materials are produced. Manufacture of clothing in South

America and Europe at this period. Now—where—history of it. Development of spinning and weaving. Economic relation in United States between production of materials North and South. Their transportation, location of mills and factories. Cotton, time of slavery. Silk, wool, flax.

(3) *Some underlying ideas in making following.*—Careful work—knowledge of home things—helpfulness and use in home, neatness, accuracy. Machine work started. Discussion of simple machinery. Economic cutting, and buying of materials. Care of tools. Patterns made for skirt. Collection of cotton and wool materials to be mounted in book for use in grade.

(*a*) Cuffs (cooking costume).
(*b*) Needle-books.
(*c*) Christmas gifts.
(*d*) Darning.
(*e*) Ironing-board cover. (Machine work.)
(*f*) Cooking apron. (Machine work.)
(*g*) Skirt. (Machine work.)

Grade VII (*one hour a week*)

(1) *Some underlying ideas.*—As in Grade VI. The development of the nation is treated as a retrospect. The present must be illumined. History is continued, up to the current history, in the making.

Geography deals not so much with familiar conditions. Asiatic and African lives are contrasted with our own.

(2) *Clothing and shelter.*—Processes in manufacture and making cloth. Printing, dyeing, bleaching. Removal of stains from clothing—care of clothing.

(3) *Some underlying ideas in making following.*—Home life and interests of girl as centre. Social consciousness to be

developed through making for others besides those in home. Economy in buying and cutting. Use of patterns. Neatness, accuracy. Collection of materials, silk, and flax, for mounting in book. Hygiene of clothing—dressing of a baby.

(*a*) Broom cover.
(*b*) Crocheted slippers.
(*c*) Jelly bag.
(*d*) Pot lifter.
(*e*) Combing towel.
(*f*) Baby wrappers.

Christmas gifts for those who have time to make them.

Grade VIII (*one hour a week*)

(1) *Some underlying ideas.*—Main study: How other countries influence our development.

Civics furnish the point of departure for a study of Greece and Rome.

Social and economic conditions of western Europe which influence us most strongly. The development of guilds, trade unions.

(2) *Clothing.*—Discussions. Development of factory life and conditions. Relation of old guilds to industries. Sweatshop labor, Consumers' League (continuation of idea of development of social consciousness starting in 7th grade). Economy through care of clothing by repair, remaking, etc.

(3) *Some underlying ideas in making following articles.*—Home life and personal interests of girl considered. Use of patterns, care, and neatness in machine stitching. Economy in buying and cutting. Collection of samples of lace edges and insertions. Cutting lessons in paper (plaid).

(*a*) Hemstitched towels (lettering).
(*b*) Patching begun.
(*c*) Christmas gifts.
(*d*) Remainder of patching.
(*e*) Drawers or petticoat.
(*f*) Shirtwaist.

OUTLINE III

This outline is suggestive of what might be presented if the aim of the elementary course of study is to give the children a knowledge of all the fields of industry. The following is illustrative of the domestic art or textile phases for the first six grades, to be followed by a vocational course in the 7th, 8th, and 9th grades.

I. TEXTILES

General Aim.—Greater efficiency through participation in the activities of social life that are found in this field of industry.

Grade I (*Time, 25 hours*)

Central Ideas.—To group work about the home activities. The furnishing of the doll's house provides opportunity for study of textiles in relation to home use.

PROCESSES AND PROJECTS	THOUGHT CONTENT
I. *Sewing*—(16 hours).	
(1) Napkin ring.	Use of napkin—care—stitch—blanket.
(2) Dust cloth.	Use in home—care—cleanliness.
	Origin of cotton material.
	Stitches—basting and running.

(3) Bedding for doll's house.	Care of bedding and bedroom.
(*a*) Sheets.	Origin of wool—use for blankets. Elementary talks.
(*b*) Pillow cases.	Origin of linen—for sheets.
(*c*) Mattress.	Comparison of four leading textile materials.
(*d*) Blanket.	Stitches, basting, running, blanket stitch.
II. *Garment-making*—(4 hours). Paper dolls.	Care of clothing. Wraps in school. Shoes—brushing—putting away. Elementary discussion of the four leading textiles, as to use for various articles of clothing.
III. *Weaving*—(5 hours). Mat (for doll's house).	Elementary discussion of process. Terms warp, woof, and selvedge. Floor covering, care, and cleanliness.

NOTE.—Crude results are expected. The aim is to give an understanding of process and to make the child as creative as possible through use of principles taught.

Grade II (Time, 40 hours)

Central Ideas.—To again group about home activities, but in advance of the play method of Grade I; to deal with actual situations, as rest-room to be furnished and cared for.

PROCESSES AND PROJECTS	THOUGHT CONTENT
I. *Knitting* (10 hours).	Spool knitting compared with stocking knitting and flat knitting. Comparison with machine projects. Comparison between knitted materials and woven cloth.
(1) Horse reins or mats.	Discussion of origin of wool yarn and manufacture of yarn by spinning; name of primitive tool.
	Articles made given to day nursery.
	Thought of others.
II. *Sewing* (30 hours).	Care of sewing tools—in home—place for everything.
(1) Needle-book.	Stitch: blanket stitch.
(2) Paint cloth.	Care in schoolroom—stitch—running.
(3) Christmas stocking.	Tarleton stockings to be filled with popcorn for Christmas tree.
(4) Iron-holder.	Care in home—materials in use discussed as to method of making—by weaving. Names of essential parts of loom.

(5) Room furnishings (co-operative work). Curtains. Pillow covers. Couch covers. Desk cover. Table cover.	Stitches: basting, running, overhanding, and blanket stitch. Hygienic furnishings. Artistic use of materials. Design: placing of furniture, hanging of pictures, etc. (Very elementary discussion.) Order and beauty in the home. Making of articles for use in teacher's rest-room. Discussion of care of rooms at home and simple decoration. Comparison made with homes and materials of the primitive peoples studied in their problems of securing shelter and clothing. This for the purpose of laying a foundation for the continued study of the industries of materials.

Grade III (*Time*, 40 *hours*)

Central Ideas.—A study of neighborhood occupations. Relation of activities to life of child, at home and in school.

PROCESSES AND PROJECTS	THOUGHT CONTENT
I. *Sewing* (*and charts*) (24 hours).	
(1) Kitchen towel.	Care of towels—in home—materials used for different kinds. Turning of hems, basting and running hem.
(2) Bag for rubbers.	Stitches: basting, stitching, running, overhanding, and chain stitches. Care of clothing—things in place. Names of materials used. Initials on bag in chain stitch. Design—placing of letters.
(3) Sewing on buttons.	Care of clothing; neatness in appearance.
(4) Pencil case.	Care of tools in use—stitches used: basting, blanket, chain.
(5) Charts:	
(*a*) Comparison of four leading textiles.	(*a*) Mounting on cardboard of samples of the four textile materials and yarn. Talks on origin and manufacture of each.

(*b*) Processes of manufacture of wool.	(*b*) Mounting of materials and pictures showing processes of manufacture of woollen materials and adaptation to use.
II. *Spinning* (6 hours). Washing, drying, dyeing, carding, spinning of wool in preparation for weaving.	Evolution of spinning to use of wheels—spinning by hand by children after individual experience in washing, carding, dyeing, etc. Use of vegetable dyes and modern dyes. Demonstration of spinning on flax wheel. Connection (very elementary) with modern process of spinning by use of pictures and, if possible, visit to mill.
Mounting results.	Material prepared and spun by individuals—used for mat to be made for teacher's desk.
III. *Weaving* (10 hours). (1) Small piece as mat, using material spun. (2) Co-operative rug, with machine-spun yarn.	Process of weaving after construction of loom. Names of parts, shuttle, heddle, batten, warp, woof, selvedge. Rug to be made in sections to be sewed together for use in teacher's rest-room. Talks on how cloth is made to-day in factories. Use of woven cloth for clothing. Design—space relationship with stripe.

Grade IV (*Time*, 40 *hours*)

Central Ideas.—Study of neighborhood occupations. Origin and distribution of raw materials in relation to New York City and its needs.

PROCESSES AND PROJECTS	THOUGHT CONTENT
I. *Knitting* (10 hours). (1) Wash cloth.	Comparison between felted, knitted, and woven cloth. Process of hand-knitting; comparison with spool knitting of 2d Grade; with stockings knitted by hand. Connection with modern knitting industry. Modern knitted products compared. Pictures of mills shown. Visit to mill if possible. Processes of setting up, knitting, and binding. Use of wash cloths and their care. Discussion of yarn used—how spun.
II. *Sewing* (*and chart work*) (30 hours). (1) Desk cover.	Greater care in technique. Hemming stitch and basting—sewing on of tapes. Care of desks—neatness.

(2) School pennant.	Study of manufacture of felt. Use of pennant in school games, stitching stitch—hemming and basting.
(3) Rabbit.	Stitching stitch, basting, and overhanding.
(4) Table runner.	Care of pets. Gift for baby in home or day nursery. Decoration in home—simplicity in relation to use.
	Designs made in art class. Stitches used—hemming and couching. Linen—origin—how made and transported. Designs made by children.
(5) Charts (5 hours). (*a*) Origin and use of cotton (3 hours). (*b*) Co-operative chart (2 hours).	Study of cotton, origin and transportation. Kinds of material most common. Mounting on cardboard.
Processes of manufacture of cotton.	Talks on manufacture of cotton materials and thread, mounting of pictures, visits to mills, if possible.

Grade V (*Time*, 30 *hours*)

Central Idea.—Modern industries in world relationships.

PROCESSES AND PROJECTS	THOUGHT CONTENT
I. *Sewing* (15 hours).	
(1) Cuffs (girls', for cooking).	Stitches: Basting—combination, hemming—(French seam).
	Care of clothing while working—neatness—use in cooking.
Sleeves (boys', for shop work).	Stitches—basting, stitching, overcasting, and hemming. (Use in shop.)
(2) Christmas gift. Spool case.	Giving—making for others.
	Stitches—overhanding and basting. Design.
(3) Repairing.	Care of clothing in home—neatness—economy.
Darning stocking.	Stocking brought from home or furnished by teacher.
	This work to come toward end of year.
(4) Repairing (hemmed patch) Garment.	Care of clothing. Buying of wardrobe. Economy and suitability of clothing.
(5) Chart. Cost of cotton and wool materials, uses, prices, and widths.	Mounting of samples on cardboard. Talks on purchase of materials (cotton and wool), kinds, prices, and widths.

II. *Garment Construction* (15 hours). (1) Doll dressing (co-operative work). *Girls.* — *Boys.* Dress. — Blouse. Petticoat. — Trousers. Drawers. — Coat. Supplemented if possible with additional articles.	Processes—seams, bands, gathering, button-holes, cutting of patterns, fitting. To give an understanding of the essential processes of garment-construction and modern conditions of manufacture of clothing in workrooms and factories. To dress boy and girl doll for children's playroom.

Grade VI (*Time*, 30 *hours*)

Central Idea.—Modern and immediate life in relation to industrial processes.

PROCESSES AND PROJECTS	THOUGHT CONTENT
I. *Sewing* (hand and machine work) (24 hours). (1) Laundry-bag (girls). Tool-bag (boys).	Machine work. Use and parts of machine—process. Straight stitching and use of gauge. Care of soiled clothing—care of tools. Design. Stitches used. Basting in preparation for stitching. Economy of time.

Grade VI—Continued

PROCESSES AND PROJECTS	THOUGHT CONTENT
(2) Petticoat (girls).	Opportunity for further practice in stitching. Talks on manufacture of clothing—great clothing industry. Its economic bearing on life in New York.
Work apron and necktie (boys).	Materials. Kinds used for particular purpose.
(3) Repairing of rents, sweaters, patching trousers, darning ravelled edges, etc.	Care of clothing. Economy in care of wardrobe.
II. *Weaving* (6 hours).	Demonstration for two hours to explain pattern, harness and treadling. Loom set up and rug woven as extra work as time affords opportunity.
(1) Colonial loom. Rug—co-operative.	*Aim.*—To show process of pattern weaving. Design.
(2) Excursion to mill. Modern spinning and weaving.	Two trips with discussion to show modern spinning and weaving.
(3) Charts.	To teach how pattern is made and controlled.
(*a*) Weaves of cloth.	To give understanding of processes of printing of cloth.
(*b*) Printing of cloth.	Mounting on cardboards by individual children.

OUTLINE IV

Student Plan[1]

Course of Study

School.—Elementary, with vocational thought.

Grades.—7, 8, and 9.

Locality.—City.

Pupils.—Girls from families of moderate circumstances.

Aim.—To prepare girls for vocational life—(*a*) wage-earners, (*b*) home-makers.

Approach.—Home, and its connected fields. Presupposes sewing in fourth, fifth, and sixth grades.

[1] This student plan shows the kind of domestic-art work which might be given in the upper grades, where vocational work is to be introduced.

Seventh Grade (Time, One and one half Hour Periods, Three Times a Week)

PROBLEM	PROCESS	THOUGHT CONTENT	COST	RELATION TO OTHER SUBJECTS
Petticoat (plain with tucked ruffle).	Free-hand drafting. Machine work. Fitting.	Increase in ability to sew neatly and make the student more capable of doing things that she should know about. Appreciation of work on a petticoat. (*a*) Amount. (*b*) Neatness and quality of work. Comparison with ready-made work. Calculation of material and cost.	.60	Arithmetic. Industrial activities.
		Textile study. (Cotton.) Relation of industry to U. S. Fibre, structure and properties.		History.
	Collection and comparison of samples.	Knowledge of cotton cloth. (1) Characteristics. (2) Material suitable for underwear. (3) Widths and prices. Better judgment of cotton materials.		
Drawers— (Simple trimming of embroidery.) French seams.	Drafting. Machine work. Joining of embroidery.	Understanding of construction of garments.	.40	Same as for skirt.

Corset Cover—				
(Simple trimming of lace.)	Drafting.	Greater skill and ability.	.35	
Flat fell seams.	Fitting.	Embroidery, machine-made.		
	Hand and machine work.	Embroidery, hand-made. (Kinds and prices.)		
	Joining of lace.	Greater skill and ability.		
	Rolling and whipping of lace.	Increased knowledge of construction of garments.		Same as for skirt.
		Lace, hand-made.		
		Lace, machine-made. (Kinds and prices.)		Physiology.
		Hygiene of underwear.		
		Care of body.		
Night-gown (slip-over. Simple design embroidered).	Use of patterns bought.	Design and application.	.75	Art.
	Hand and machine work.			Physiology.
	Simple original design embroidered.	Hygiene—clothing of body at night.		
Repair of underwear.	To be applied on garments.	Neatness and economy of underwear.		
		Laundering.		
Patching.	Patches { hemmed / flannel.	Removal of stains.		
Darning.	Darns, stockings.			
	Class discussions and demonstrations.			Chemistry.

Seventh Grade—Continued

PROBLEM	PROCESS	THOUGHT CONTENT	COST	RELATION TO OTHER SUBJECTS
Bedroom furnishings. Curtains.	Original design applied. Discussions, etc. Collection of samples.	Suitable and appropriate bedroom furnishings. Cost. Artistic furnishing. Greater interest and knowledge. Home life and activities. Bed furnishings. Material. Care.	.30	Art Hygiene.

Eighth Grade (Time, Two Hours, Three Times a Week)

PROBLEM	PROCESS	THOUGHT CONTENT	COST	RELATION TO OTHER SUBJECTS
Shirtwaist (tailored).	Taking measures. Drafting. Fitting. Collection of samples.	Design. Good taste in dress for school. Textile. Shirtwaist material (quality, width, price).	.45	Art. Arithmetic. Industries.

		Printing and finishing of cotton material.		
		Better judgment of material.		
		More intelligent shopper.		
		Social consciousness developed through remainder of course.		
Wool skirt.	Drafting.	Textile study (wool).		
	Fitting.			
	Handling of wool material.	Characteristics, fibre.		Industrial history.
		Characteristics, material.		
	Collection of samples.	Wool mixtures.		
		Study of material. Better judgment of materials.		
		Hygiene and care of wool clothing.		
Repair—				
Patching.	To be applied to garments.	Economy and care of clothing.		
Darning.	Patch.			
	(Overhanded, stitched-in, darned.)	Neatness in appearance.		
		Repairing as a vocation.		
	Darning (cloth).			

Ninth Grade (Time, Three Hours Every Day)

PROBLEM	PROCESS	THOUGHT CONTENT	COST	RELATION TO OTHER SUBJECTS
Millinery—				
Facings.	To be applied to hats.	Economy and utilization of old materials.	.50	Industrial field of millinery.
Folds.				
Renovation of materials and other essential processes.	Velvet.	Development of resourcefulness.		
	Felt.			
	Flowers.			
Winter hat.	Ribbon, etc.	Study of line in relation to the face and figure.	$3.00	Art and design.
	Buckram frame.		4.00	
	Covering.	Good taste in hats.		
	Trimming.	Color.		
	Calculation of cost.	Comparison with ready-trimmed hats.		
	Sketching of hats.			
Hat for her mother.		Increased knowledge and ability.	3.00	
		Doing for others.		
		Style suited to age.		
Wool or silk dress or other material (less expensive) with fitted lining.	Crinoline modelling.	Design, costume.	10.00	Industries.
		Good taste in dress.	or less.	Art.
	Adaptation of bought patterns.	Study of line in dress.		
		Textile study.		
(Designed by pupil.)	Trimming, original design.	(Similar to that for wool.)		
		Intelligent shopping.		Geography.

	Applied. Fitting. Calculation of cost. Collection and study of samples.	Economy in dress. Dressmaking as a vocation.		History of costume.
Repair— Replacing parts of garments. Making over.	Practically applied.	Economy. Originality. Resourcefulness.		
Lingerie dress. (Graduation dress.)	Original design. Fine hand-work and machine work. Collection and study of samples.	Good taste in dress. Suitable materials. Costume design. Costume design as a vocation. Comparison with ready-made dresses. Study of sweat-shop labor, Consumers' League, etc., and increase of interest in such questions.	5.00	Art. Industrial world.
Clothes.	Computation of cost of wardrobe.	Relation of cost of clothes to income. Relation to cost of living. Better management of home.		Arithmetic.
House furnishings.	Computation of cost.	Relation to cost of living. More intelligent home-makers.		Arithmetic.

OUTLINE V

Student Plan

COURSE OF STUDY FOR THE ELEMENTARY SCHOOLS

Fifth, Sixth, Seventh, and Eighth Grades

The city for which this course is planned is located in the western part of the United States, in a beautiful valley, one of the most fertile and prosperous farming districts of the State. The city was first settled about fifty years ago, and has at present a population of six to seven thousand inhabitants.

It contains three knitting factories, several stores, and three or four respectable places of amusement, a public library, several churches, etc.

The nationalities represented are Scandinavians, English, and Americans.

The largest percentage of the population make their living by farming, many of them living out on their farms in the summer and moving into the city for the winter, so as to send the children to school.

The public schools have two large central school buildings, with eight smaller ones scattered through the city, some of which contain only two rooms. The number of pupils enrolled is about 1,496, with an average number per teacher of 50.

The schools are very crowded and in great need of more buildings, which will be put up as soon as financial circumstances will allow it.

A special supervisor for primary grades has been provided, and excellent plans for constructive work, clay modelling, etc., have been introduced with very good results.

Other manual training work has not yet been introduced, owing to the lack of funds; so this course of study for the

upper grades has been planned with the end in view of making as few expenses for the school as possible, and still giving the girls a course of study which would be of value to them.

The work is to be given by the grade teacher, under the direction of a domestic-art supervisor, and will have to be given in the regular class-rooms until more buildings are put up.

Machine sewing has been left out, partly on account of the expense involved in getting machines and of finding room for them, and also because two-thirds of the girls will continue one or more years in one or the other of the high schools.

The material is to be purchased by the children; they are not poor, and the parents will be perfectly willing and glad to pay for it.

The aim of the course is to make the girls helpful at home and in society, independent, and appreciative of good work, as well as the many opportunities they have over those of their parents. In the study of textiles, comparisons may be made of the past and present conditions in the West with those of large manufacturing centres in the East, and reasons shown why the woollen mills in the West cannot successfully compete with those in the East, and foreign lands, etc.

Whenever possible, the work in domestic art is to be correlated with drawing, nature study, arithmetic, history, and geography.

Equipment, such as needles, thimbles, scissors, etc., will be provided by the children, while illustrative material and a few boxes for supplies and finished work will be provided by the school. Most of the work should be kept for exhibition to be given at the end of the year, especially for the first two or three years.

For between work the children could make a second article, and at the end of the year this could be disposed of in some

way, and the money go to an *equipment fund*, which should be kept until more buildings are put up, and rooms fitted equipped for sewing.

The schools are in session thirty-four weeks of the year.

Grade V (Fifty Minutes per Week)

Some Underlying Ideas.—

(1) Home life and surrounding occupations. The sheep industry. Indians and the early settlers.

(2) Clothing and shelter.—Relation of farm life to clothing. Comparison of early pioneer life with present time. A study of wool, cotton, linen, silk—making a chart.

(3) The underlying thought in making the following articles. Care of clothing and furniture. Tools. Also care of what belongs to others. School property.

HOURS		COST
8	Work-basket. (For tools)	$0.05
3	Canvas pin-cushion. (Basting and blanket stitch)	0.05
3	Dust-cloth. (Basting and running)	0.03
8	Book-cover. (Stencilling with outline—over-handing) original design	0.15
8	Laundry-bag. Basting, hemming, stitching stitch)	0.25
4	Preparation of textile chart	0.02
34		$0.55

For between work initials may be made on the laundry-bag in cross-stitch or outline. Design made in class.

Grade VI (Fifty Minutes per Week)

Some Underlying Ideas.—

(1) Study of the development of West. Problems in relation to transportation. Comparison of conditions in the East and West. Comparison of prices of material with those in early days (as much as a dollar was paid for a yard of calico).

(2) Clothing and shelter.—Industrial resources. Processes of wool and cotton before weaving. The suitability of these fibres to clothing. Visits to knitting factories. Simple machinery discussion.

(3) Underlying thought in making the following articles. Helpfulness in the home. Cleanliness, neatness, accuracy. Correct position. Simple drafting.

HOURS		COST
3	Needle-case canvas. Blanket and cross stitch	$0.05
4	Jelly-bag. Hemming and overhanding. Tape	0.10
9	Wash-cloth. Knitting	0.05
4	Darning. Stockinet	....
10	Short kimono. French seams. Facings . .	0.35
4	Dish-towel. Hemming	0.10
34		$0.65

Grade VII (Fifty Minutes per Week)

Some Underlying Ideas.—

(1) The development of the nation. Large industrial centres. How other countries influenced our development.

(2) Clothing and shelter.—Weaving. Primitive methods used by the Indians. Printing, dyeing. Study of silk and linen. Properties. Suitability of materials for different uses.

(3) Underlying thoughts in making the following articles. Social consciousness through making for others besides those at home. Economy in buying materials. Cleanliness, orderly housekeeping. Original designs for weaving and table-cover. The artistic side of decoration emphasized.

HOURS.		COST.
7	Cooking apron. Gathering, band, button-holes	$0.25
10	Rug. Weaving	0.20
10	Table-cover. Appliqué	0.40
4	Patching. Overhand. Hemmed	....
3	Work-bag. Free construction	0.10
34		$0.95

Collection of samples of materials, with price and width.

The rug is to be made in a certain number of squares of a definite size. Each girl makes a design and the best one is selected. The rug when finished is to be disposed of and the money to be kept for equipment.

Grade VIII (Fifty Minutes per Week)

Some Underlying Ideas.—

(1) European countries which influence our market. Commodities for clothing sent from other lands.

(2) Clothing and shelter.—Development of factory life and conditions. Economy through care of clothing by repair, remaking, removal of spots, etc.

(3) Underlying thoughts in making the following articles. Home life and personal interest of girl considered. Economy in buying and cutting. Home decoration. Simple drafting for

underwaist. Design for embroidery. Neatness in dress. Choice of color. Collection of samples of lace edges and insertion.

HOURS.		COST.
6	Towel—hemstitched	$0.20
10	Underwaist—simple design in eyelet	0.40
4	Repairing—various kinds	....
4	Napkin	0.30
10	Cushion-cover	0.50
34		$1.40

These outlines deal with the domestic-art work as it is related to the present elementary school curriculum. In the near future the writer believes it will be necessary to so readjust the studies of the elementary and high schools that there may be a better relationship and continuity of study for those who will go on to high school for a short period only and a decided change of course of study for the large percentage of children who leave school at the end of the sixth or eighth grade. For those who must leave at so young an age, a course of study should be planned which will consider the needs of those children who must join the large army of wage-earners at the earliest possible moment. They must be prepared for citizenship and social living. The best which can possibly be given them

in this short period should be theirs. The most important phases of hygiene and knowledge of the laws governing health can be given, they can receive some kind of training in skill along some line of useful vocation. In domestic-art work for girls this would mean training in the trades centring about the needle, and the spending of as much time as possible on the art, music, English, and mathematics which bear a relationship to the special line of interest. Women of originality of thought and purpose who have studied the field of industry open to young wage-earners, as well as the field of general education, should be chosen to plan and conduct this work. It will be largely experimental for a while, but must be so conducted until the results have been studied. The work undertaken in Boston at the North Bennett Street Industrial School is of this experimental nature and the results are being watched with much interest. Opportunity is there given in the seventh and eighth grades for intensive industrial work during half of each day. Outline IV is suggestive of possibilities if the reconstruction of the curriculum of the first six grades gives opportunity for vocational work to follow in the seventh, eighth, and ninth grades.

PART III

THE RELATION OF DOMESTIC ART TO SECONDARY EDUCATION

CHAPTER X

CAN DOMESTIC ART CONTRIBUTE TO THE GENERAL AIMS OF SECONDARY EDUCATION?

BEFORE it is possible to decide whether domestic art can contribute to secondary education, one must have an understanding of the general meaning and aims of secondary school work. As the term is generally accepted it means the four years course of training which connects the elementary school with higher schools. This may be in secondary schools of various types both public and private. In the broader sense, secondary education may mean all kinds of courses of one, two, three, or more years, which follow the work of the elementary school, evening or day continuation classes in public schools or associations which contribute to the advance of one's education beyond the accomplishments of the eighth

grade. This work may be literary, scientific, or artistic, and of a practical or technical character.

"The education demanded by a democratic society is, therefore, an education that prepares an individual to overcome the inevitable difficulties that stand in the way of his material and spiritual advancement." While this defines education generally, it seems also to be particularly apt in application to this field of work, for it is during this period of education that youth is so often brought face to face with the difficulties of life, especially in relation to livelihood. Mr. Hanus has outlined the general aims of secondary education very fully. Life in order to be worth while must show growth and an ever-increasing usefulness in the world, so that the secondary education of today must be a preparation for life which is to be one of helpfulness and service, both to the individual and to society.

General aim of secondary education.

As the life interests of individuals are so various, secondary education should offer possibilities of choice so that during that period the pupil may discover the path of life which his interests direct him to follow. This thought of discovery of life purpose,

Pupils to be "led to the discovery of dominant interests."

which should be the key one, makes the planning of work very difficult. This interest may lead the pupil to self-support or to a life of study or invention which may count for service to himself and others. Secondary education should so stimulate the pupil that he will realize his duty and responsibility toward society at large, and see that ultimately he must figure in the making of the laws of his country and in the fulfilment of duties of public trust in all fields of work. Early encouragement to take part in the social work of the community may be a guide to leadership and an incentive to intelligent and helpful participation later in life.

The above definition of education calls attention to the spiritual advancement of the individual. Secondary school work should introduce the individual to an appreciation of the beauties of the "refined pleasures of life," those things in art, letters, science, and religion which contribute to higher and more spiritual living. Education which omits this entirely deprives the individual of those inner resources which count for so much when the practical issues of life sometimes do not bear fruit. They are the inward life and strength which often impel the individual to greater things. Secondary work should

so interest the pupil in this field of thought that he will continue to be interested and to develop along these lines as he proceeds in life.

Secondary education should not neglect the physical advancement. Opportunity should be given the pupil for physical development and intimate study of the laws governing life and its care. This knowledge is the most vital and important if the individual is to accomplish anything in the world. This period of adolescence adds another difficulty which must be considered by those planning the secondary school courses.

Physical advancement of great importance.

These aims which contribute to the development of the individual count also for the development of society and for the betterment of living. The function of secondary education has been given as "the most widely available organized force for elevating, refining, and unifying a democratic society."

All phases of work of secondary nature should contribute to these general aims. If these aims are analyzed more specifically, they are

(1) Those which relate the individual to society and help him to take his place among his fellows.

(2) Those which give him the broader view of life, of its accumulation of culture, or æsthetics.

(3) Those which are practical and enable him to select a vocation which will be his life interest or means of livelihood.

Domestic art in relation to these aims.

In considering the field of domestic art in relation to these aims, it is possible to find many lines of thought which will contribute to their accomplishment.

A knowledge of domestic-art work will enable any woman to be a better consumer, producer, and home-maker in any community. It will enable her to buy economically and wisely, to select with wisdom and good taste the best and most appropriate clothing and furnishings for her home, to manage it systematically for the good of all its members, and to enter into the problems of social life intelligently. Can all this be accomplished by means of domestic-art work in secondary education? There are many possibilities. The teacher's example will be one of the most dominant factors. Her interest in life, in society will be an impelling force. Talks and suggestions in relation to woman's work, wages, sweat-shop labor bargains, Consumers' League, open the mind of the awakening girlish consciousness to a new field of thought. Woman's relations to the betterment of conditions of the working-woman, of better

laws, of economic relations, suggest to her fields of work for the future. The teacher's direct interest in and support of these in her own town are factors which count for influencing the girl to participate in such life-work. Talks from officials and others interested in betterment, and in economic conditions, are another avenue of possible connection. Visits to institutions, factories, or shops are often possible for study—the clothing, food, etc., of children and adults in institutions, suggestions for betterment—the purchasing power of a dollar—the best for the least amount, all suggest ways of arousing interest which may later lead to an active interest in the work of social welfare. This may be as life-work or vocation either for a means of livelihood or not. As a means of livelihood the field offers many opportunities for institutional buyers, philanthropic and welfare workers in school systems, charities and betterment work of the large factories connected with the textile industries, or in various other fields of work.

Domestic art in relation to social life.

Secondary education should in this social connection aim to give the girls true knowledge of the organization of the institutions and activities of government. Courses in history, civics, economics, and

social studies all contribute. This is not the function of domestic-art work, but the teacher of this subject can relate her work intelligently to it and lend a hearty co-operation in the general training for good citizenship.

Domestic art in relation to vocational aim.

Vocational education has been defined as "that which equips an individual for self-support. Self-support may not necessarily mean a wage-earning capacity, it might be home-making or work along the line of one's dominant interest." Not all of our girls are privileged to proceed to college and enter upon courses of work which may lead later to their life vocations in large fields of professional interest and study. The secondary school should provide some means of enabling the girl to find herself in relation to her life-work as a vocation along other lines than those of the higher professions. Courses in household arts, commercial and other business courses, are needed in order that if the girl have ability in these directions, she may discover it and her relationship to them, that she may emerge into larger life and under wise direction learn the source of her pleasures or the life-work in which she will voluntarily engage. Secondary education should acquaint the girl with

the importance of the discovery of a vocation so that she may begin her life-work early. "The great mass of human happiness will always arise out of doing well the common things of life, and the happiness of the individual will lie in that creative genius which does to-day the same thing it did yesterday, but does it better."

Secondary education for girls must offer courses which deal with the common things of life, as well as the literary and æsthetic work. The two should go hand in hand and one supplement the other. Vocations may be the direct outgrowth of the household arts courses or may spring from the so-called more cultural courses of the school. The aim of either is for greater service and efficiency.

Courses in domestic art may lead directly into many vocational fields. That of the home-maker is the first and foremost in our consideration, for it is she upon whom we depend for the growth and development of the homes of the future and the rearing and education of our children. There can be no greater vocation, and any secondary school entirely fails in its mission which neglects to give the girls an opportunity for studying it. Courses in dressmaking, costume designing, or millinery may lead directly to

life-work along these lines. The secondary schools, according to their type, may only introduce or offer more intensive study in these fields of work. These intensive courses will prepare for direct application in establishments of trade. They may not give a full trade experience, but they do give the girl a foundation for later training which will cause her to rise rapidly as she gains in experience.

Domestic art in relation to the so-called cultural studies.

Courses in domestic art can contribute to the so-called general culture work and thought of the school. The modern idea of culture is much broader than that formerly in use, and the new social relationships and civilization call for a change in adjustment of our so-called cultural courses. The practical studies appeal most thoroughly to many girls and it may be that through these only can the introduction be given to the more general cultural studies. For the girls who do not intend to go to college, Latin and Greek are a waste of time. It is far better for these to study the more modern subjects which are adapted to their needs: the history of industry and commerce, politics and education, art and philanthropy, modern foreign languages, literature of the mother-tongue, the elements of commercial training,

fine arts and mechanic arts, economics and government. This scope of programme offers difficulties to those who must prepare the course of study for the individual. General culture has been defined as "the capacity to understand, appreciate, and react on the resources and problems of modern civilization." No one individual can choose all the work offered, but should be taught to think about his choices and do so under guidance. This direction of choice will depend largely upon the tact and good judgment of the teachers. Secondary education should be a constant training in foresight and responsibility, these two great giants which make for the formation of character and good citizenship.

Domestic art in this sense may be cultural in many ways. The various courses in art, design, costume and millinery designing, all have as their foundation the general principles of design. Garment-making, trimming, and decoration are truly studies in line and space, balance, rhythm, and harmony of color. A beautiful gown or hat is a true study in art and requires artistic sense and feeling to produce it. The study of fabrics, their manufacture, composition, and adulteration opens up the whole field of science. The dyeing, cleansing, and laundering of materials

offer a practical application of chemistry and its principles. The hygiene of clothing relates directly to the studies in physiology, and some of the principles of physics and geometry are exemplified in the drafting of garments and the use of machines.

History has a decided connection with the domestic-art field. The history of industry is most interesting and vital in relation to the evolution of textile manufacture. The history of rugs, old textiles, and costume are as interesting as studies of ancient Greek or Roman life and may be connected with these. Economics and sociology bear directly on many phases of domestic-art work, and commercial geography makes the study of fabrics of much more value and interest to the pupil.

The possible so-called cultural relationships are very many, but it depends entirely on the skill and tact of the domestic-art teacher in her co-operation with the other instructors to make these relationships vital.

With these general aims for secondary education in mind, and the possible scope of domestic-art work as it contributes to the accomplishment of these aims, it is possible to turn to the selection of material for various types of secondary schools, according to their needs.

References for Study

"A Modern School," Hanus.

"Secondary Education in a Democratic Community," Hanus. Vol. XI "English Reports on Education."

"Report of Lake Placid Conference on Home Economics," 1908.

"The American High School," J. F. Brown.

CHAPTER XI

THE SELECTION AND PLANNING OF WORK FOR THE SECONDARY SCHOOLS

With the previous chapter in mind, we are ready to turn to the selection and planning of work for secondary schools.

We are at once confronted by the numerous factors which must be considered in the planning of work. They are somewhat similar to those affecting the elementary course and yet more difficult. Our primary consideration is the girl—our girl with all her aspirations, hopes, and fears. She is very appealing at this period, for she is so very human in the developing and unfolding of her nature. We are to guard and guide her, and to watch her physical and psychological development. The teacher of domestic art has an unusual opportunity to help and protect in her close association. She must be guarded against too great physical and mental strain when she is in need of rest and relaxation. Her ambitions

are to be encouraged, her fears allayed, her hopes renewed. The teacher should be wise in her selection of problems during the early high school years and should bear distinctly in mind the peculiar character of this period of mental and physical development. The good of the girl is the ultimate goal, and without health nothing can be accomplished.

The social ideals and life of the community should be kept in mind in planning the work for this course, for after all we are preparing the girl to take her place in the community and to promote its welfare. The needs of the home, of the school, and neighborhood institutions should be considered. Problems may be introduced into the course which may be of use and value in those institutions and develop an interest in them. Any connection which the domestic-art teacher can make to arouse the social consciousness of the girl and put her in touch with useful life will be of great value to her. This added interest which is the only true interest certainly touches life and enables the girl to see her relationship to some of its problems.

Social life of the community a factor.

Time and locality enter as factors in relation to the planning of this work. The local school board may be authorized to decide the number of hours

per week which are to be devoted to the domestic-art work. This may handicap the teacher, for either too much or too little time may be allowed and the proper balance be lost between the academic and household arts studies. The time should naturally be regulated by the aim of the particular school and local conditions, but very often those who are entrusted with the regulation of time are not alive to the differences to be kept in mind and do not understand the proper relationships or aims of the various types of schools. The course of study is always more or less influenced by the particular locality or environment—by environment is meant all the peculiar local conditions which affect planning. A private school, for example, located in a suburb where there is opportunity for more or less outdoor life, may introduce into its course problems of a different character from those which may be of particular value in the city school under other conditions.

Time and locality.

The cost of the introduction of the work may be a problem for consideration, but in the majority of secondary schools the pupils supply most of their own materials. The board of education or school often supplies the tem-

Cost often affects one's plans.

porary equipment of needles, thread, etc., and nearly always the permanent equipment of machines, tables, and other articles of furniture. Parents are usually quite willing to supply the necessary materials, for the garments produced have as a rule a utilitarian value and are to the mother an economic saving of time, labor, and money. In the case of the introduction of more technical or trade work, it is not possible for the home to furnish the necessary supplies. The work in order to be of most value must be of a certain variety, and the materials used must be such as will be worth while handling. The problem of funds to meet the needs is a serious one, but is met in many ways by the ingenuity of those in charge. Shops and order work seem to be the best solution, but also have difficulties, for patrons wish well-finished results, and often in the process of learning many efforts must be made by some children before a creditable piece of work is produced. These inferior articles may be sold for little, perhaps just to cover costs of materials—and must often be sold at a sacrifice. This makes the trade school course of study a particular problem in itself in relation to cost, and a trade school will always be an additional cost to the management for materials on account of the

unavoidable waste during the process of learning. In many schools of classical and manual training type students make articles for sale which are given to the school, or take orders for household linen or other articles for neighboring institutions. This may or may not be an excellent plan according to management, but often enables a school to purchase the necessary permanent equipment of chairs, tables, machines, etc., when the local authorities may not be able to do so.

Another factor to be considered is the final goal of the secondary school. This will be more fully discussed in considering the types of school. Is the course to prepare for college entrance and will any credit be given for it? is a question which the domestic-art teacher faces in the planning of her work. The selection of subject-matter will be influenced as well by what has gone before as by that which is to follow. Have the pupils had any domestic-art training in the grades, what has been its scope, in what grades was it given, will a lengthy review be necessary? The course must be moulded accordingly to meet these considerations, which must be kept in mind if the course is to be well planned. Very often the do-

Aim of each type of school to be kept in mind.

mestic-art teacher discovers that the grade work has been almost entirely forgotten because of its discontinuance during the seventh and eighth years of study.

"When society enters distinctively into a new phase of its evolution, there must be a new distribution of educational values." The greatest difficulty which the teacher of domestic art must face is the differentiation of courses for various types of secondary schools, for unless she understands the aims and conditions which affect the various types she is not apt to be wise in her selection of subject-matter to meet those needs. As society has entered this new phase of its evolution, the industrial era, one finds such a variety of types of secondary schools that it is difficult to distinguish and to differentiate the work for the various kinds, because of the general feeling of uncertainty as to the real goal of each type. Unless the aims are understood the distribution of values will lack balance and proportion. The teacher of household arts must guard against the temptation to think that her subject is the only one in the curriculum for consideration.

It may be well to analyze somewhat briefly the main aims of some of the types of secondary schools

and to follow these with suggestive outlines for courses of study under varying conditions.

Domestic art in a classical high school course.

The classical high school or the classical course in high school seldom permits of very much work in household arts. As a rule the girls are preparing for college and all the available time must be spent in working off the necessary requirements. If the college entrance board would accept certain work in household arts, it might be possible for a course to be arranged which would not only have a classical bearing, but be of great value to the girl in her development and life in society. When household arts work is given in the classical courses it is nearly always elective, and not required, as it should be. Fortunately, however, girls feel instinctively the need of this work, and their natural interest leads them to pursue it whenever it is possible for them to do so. The time at most is very short.

The outline submitted for the classical type of course is for two hundred and forty hours of work, to be distributed as seems best in relation to the other work of the school. As a part of a household arts course the same amount of time should be given to the so-called domestic science phases of the

work. The work of the classical domestic-art course should be interesting and offer variety. The girls work as a rule on problems of personal interest and the main aim of the work is training the girl for usefulness in her home and in her relationships with others.

COURSE IN DOMESTIC ART

PART OF HOUSEHOLD ARTS COURSE FOR SECONDARY SCHOOL OF CLASSICAL TYPE

I. Factors governing the selection of this subject-matter for a possible condition.

(1) *Previous Training.*—Hand-sewing given in sixth and seventh grades of elementary school.

(2) *Secondary Course* to count toward college entrance.

(3) *Location of School.*—Suburb of Philadelphia.

(4) *Girls.*—From homes of best middle class. Some go to college, others to be prepared for home duties.

(5) *Time.*—Two hundred and forty hours, to be distributed as seems best in working out programme of all studies, possibly three hours per week for two years.

(6) *Cost.*—Pupils supply nearly all materials.

II. Course of study.—Clothing.

(1) *Problems.*

(*a*) Underwear (three pieces).

(*b*) Shirtwaist gown or simple lingerie gown (one piece or waist and skirt).

(*c*) Making of lined gown.—(1) Skirt—drop skirt.—(2) Waist.

(*d*) Millinery.—(1) Fall or winter hat. (2) Summer hat—straw or lingerie.

(*e*) Embroidery.—(1) Table cover or pillow top. (2) Lingerie hat or underwear (above mentioned), or Christmas gift.

(2) *Processes* involved in working out above problems.

(*a*) Hand-sewing (review).

(*b*) Machine-sewing.

(*c*) Drafting with use of patterns.

(*d*) Fitting and hanging of garment.

(*e*) Designing for decoration and draft of patterns.

(*f*) Computations of costs.

(3) *Thought Content* to be developed while presenting above problems.

(*a*) Textile study. Source of materials, properties, manufacture, design, and workmanship of textiles.

(*b*) Use and adaptation of commerical patterns and relation to drafting.

(*c*) Hygiene in relation to wearing apparel. Sweatshop labor.

(*d*) Study of relative values of hand and machine work.

(*e*) Suitability of apparel in relation to use and income. Line and color to be adapted to wearer. Economics of the purchase of materials, prices, widths, quality, etc., in relation to use and planning of the wardrobe. How to reduce cost with good effect.

(*f*) Training for accuracy, neatness, foresight, and responsibility. Development of social consciousness.

(4) *Allied Subjects.*

(*a*) Art in specific design, color, adaptation of line to space—relation to human form. History of costume as expression of social development; appropriateness of clothing and beauty.

(*b*) Physics.

(*c*) Commercial geography.

(*d*) Industrial history.

(*e*) Economics (simple form).

(*f*) Physiology (hygiene of clothing).

(*g*) Chemistry (dyeing of materials).

(5) *Related Interests.*—To be developed while teaching above problems.

(*a*) Visits to shops, factories, museums, and libraries.

(*b*) Use of books and current magazines as of value in above study.

(*c*) Work of organizations, as Municipal League, Consumers' League, Board of Health, Trades Unions (relation of employer and employees).

(*d*) Sweatshop problems, duties, customs (imported gowns, etc.).

III. Shelter and household management.

(1) *Problems.*

(*a*) Making of charts showing relation of cost of clothing to income, also charts of color schemes for rooms and furnishings.

(*b*) Making of furnishings.—(1) Scarf for table or pillow. (2) Curtains. (3) Weaving of cover.

(*c*) Keeping of accounts—informal talks on house management in relation to furnishings and clothing.

(*d*) Laundering of materials (cleansing, dyeing).

(2) *Processes* involved in working out the above problems.

(*a*) Stencilling.

(*b*) Block printing.

(*c*) Hand-loom weaving. Co-operative work.

(*d*) Exhibits in school of rooms furnished.

(*e*) Trial of method of keeping personal accounts.

(*f*) Cleansing and dyeing of old materials.

(3) *Thought Content* to be developed while presenting above problems.

(*a*) Artistic and beautiful furnishings of home; spirit of home-making; ethical and social side; kind of home in relation to income.

(*b*) Management in relation to repairs of clothing, linen, rugs, etc. Care of clothing and house furnishings. Laundering of materials.

(*c*) Keeping accounts. Clothing and furnishings, their relation to income.

(*d*) Economy of time in relation to making and use of home things.

(*e*) Business management. Simple business rules, and law for women.

(4) *Allied Subjects.*

(*a*) Art—study of design materials, color in relation to rooms.

(*b*) Household sanitation—in relation to furnishings.

(*c*) Chemistry—color; cleansing of wood and materials; dyeing, laundering.

(*d*) Economics (very simple). Law of supply and demand; money—fall of price.

(5) *Related Interests.*

(Same as above subject, (II) Course of Study. Clothing.)

The domestic-art work in a manual training high school course differs principally from the classical in the amount of time given to the subject. The work is generally required, at least a certain number of points of it, and opportunity given for more elective work where the girl is interested in a specialty and is contemplating more advanced training after leaving the school. The main aim of such work is proficiency which will enable the girl to run her household affairs intelligently and well, or make it possible for her to go into other schools or professional establishments for further study along such lines. Many of the domestic-art graduates of the manual departments of high schools enter dressmaking or millinery establishments in order to become more proficient along these lines, or continue into higher schools and later teach this specialty. The aim of the manual training course, as the work has been planned in most manual training schools, is to keep in mind the development of the girl without especial emphasis on the vocational aspect of the work. The aim of the work is not to train for a trade, although very often some of the students do specialize in such a direction because of the interest awakened. The

Manual training high school course.

work generally offers variety, and the course for girls permits of many phases of industrial arts, such as metal work and clay modelling, as well as the household arts work of cooking and sewing. The possibilities for such courses have already been enumerated and will be regulated by the local conditions determining the formation of plans.

STUDENT PLAN, TEACHERS COLLEGE

Domestic-Art Course for Manual Training High School

CONDITIONS

Size of City.—From 90,000–100,000 inhabitants.

Nationalities.—American, English, German, and Scandinavian.

Elementary Schools.—Some hand-work is given in the elementary schools in this city, but children coming from outside settlements and smaller cities may not have had any hand-work at all.

Higher Institutions of Learning.—A State university, a high school, and several church high schools and colleges.

Further Description of Environment.—The largest enterprises of the State are agriculture, mining, and sheep industry, and this city being the centre of attraction, a good deal of business is carried on there. The city has several large department stores, but no factories of great importance. Most of the people have their own homes, and as a rule live under favorable circumstances.

AIM OF THE SCHOOL

The aim of this manual training high school course in domestic art is to offer to girls a practical education, in order that they may discover and exercise their best powers, while obtaining accurate information in many practical problems of life.

The special aim of this course in domestic art is to prepare the girls to be more efficient home-makers, and to be better prepared to take their place in society; to cultivate an appreciation of home, and to dignify housework by improving the method of work as well as the articles made.

Throughout the course emphasis is to be placed upon economy, suitability, and as far as possible, upon the cultivation of order, neatness, responsibility, and unselfishness whenever there is a natural relationship.

The subject-matter is to be correlated with art, history, geography, nature study, arithmetic, etc.

Twenty periods a week are to be devoted to academic studies such as English, mathematics, science, history, language, music, and elocution. By a wise selection of studies it would be possible for those who intend to go on to college, to meet the requirements.

Ten periods a week are given to domestic art, domestic science, and drawing. Physical training will have to be given outside of the ten periods, unless the hours can be arranged differently.

The work is planned for one-hour-and-forty-minute periods, which may seem long for the first year; but as a rule the first year high school girls are not under fifteen years old and would be able to stand it.

A good deal of garment and dress making have been arranged for in this course, for the reason that the parents are

inclined to appreciate the utilitarian value of this subject more than the educational; hence an attempt is made to meet the approval of the parents as well as to fulfil the aim of the school. Many mothers depend on and greatly appreciate the help the daughters can give them during vacation periods, especially the help with the family sewing. This is one of the reasons for introducing children's clothing.

The school year is thirty-four weeks.

Domestic Art.—Two one-hour-and-forty-minute periods a week.
Domestic Science.—Two one-hour-and-forty-minute periods a week.
Drawing.—Two fifty-minute periods a week.

SEWING PERIODS	ARTICLES	PROCESS	THOUGHT CONTENT	ALLIED SUBJECTS	COST
4–5	Workbag. To be used during the year.	Hand-sewing. Basting, backstitch, hemming, overcasting.	Orderliness, cleanliness, neatness.	Art.	$0.25
2	Pin-cushion.	Overhanding, cross-stitch, initials.	Suitability of material.		0.03
4	Cooking-apron.	Hand and machine.	Machines: Use; care of; value.	Physics.	0.25
5	Short kimono.	Drafting pattern. Hand and machine.	Economy in cutting. Appropriate use.	Mathematics.	0.35
8–10	Christmas presents. Making and fitting out a work-basket.	Weaving of baskets. Stencilling and hand-sewing.	Originality, unselfishness. Indian basketry.		0.25–0.30
36	Skirt, corset-cover, drawers.	Drafting of pattern. Hand- and machine-sewing, buttons and button-holes, tucking, setting in lace.	Study of textiles. Properties of cotton, fibre, history, manufacture.	History. Geography. Physiology. Hygiene.	5.00–6.00

			Suitability to purpose. Linen and cotton composition, simple tests, collection and mounting of samples with widths and prices.		
4	Darning, patching. (Articles brought from home.)	Stockinet and clothing darns, hemmed patch, flannel patch, etc.	Economy, care of clothing, to bring home and school in close relation.		

SECOND YEAR

Domestic Art.—Three one-hour-and-forty-minute periods a week.
Domestic Science.—Two one-hour-and-forty-minute periods a week.

DRESS-MAKING PERIODS	ARTICLES	PROCESS	THOUGHT CONTENT	ALLIED SUBJECTS	COST
8–10	Plain shirtwaist.	Drafting pattern, changing pattern, designing, cutting, fitting.	Appropriateness of dress, economics, the influence of woman upon the market.	Art.	$0.50
4–6	Crinoline modelling.	Designing, trimming.		Industrial history.	0.25

SECOND YEAR—CONTINUED

DRESS-MAKING PERIODS	ARTICLES	PROCESS	THOUGHT CONTENT	ALLIED SUBJECTS	COST
30–35	Unlined dress, wool or worsted.	Estimate of material, use of pattern, designing cut pattern, simple trimming.	Ethics of shopping, hygiene of dress, keeping accounts, and estimating cost of wardrobe. Economy of time and materials.	Physiology. Mathematics.	5.00–8.00
10	Children's clothes, little girls' dress.	Planning and making.	Combination of texture, study of textiles continued, wool and silk.	Geography.	0.50–1.00
5	Remodelling.	Cleaning, planning, and making.			
30–35	Summer dress.	More elaborate trimming, hand-made if time permits.	Properties and manufacture. Sweatshop labor.		3.00–6.00

Domestic Art.—Two one-hour-and-forty-minute periods a week.

Household Art.—Design, two fifty-minute periods a week.

Domestic Science.—One period a week. Or two fifty-minute periods. Hygiene may be given.

EMBROIDERY PERIODS	ARTICLES	PROCESS	THOUGHT CONTENT	ALLIED SUBJECTS	COST
4–6	Small practice piece.	Some of the most prominent stitches given.	Accuracy in execution.	Art.	$0.10
10	Hardanger or eyelet centrepiece.	Cloister and drawn-work, stamping.	Discussion of bedroom and dining-room furniture, artistic and hygienic decorations. (Illustrated with furniture if possible.)	Design and color. Hygiene.	0.30–0.50
4	Tablerunner.	Hemming and stencilling.			1.00–2.00
15–17	Cushion.	Appliqué or Arabian embroidery.	Collection of pictures from catalogues mounted. Dining-room and library, living-room.	Visit to furniture stores.	

THIRD YEAR—CONTINUED

EMBROIDERY PERIODS	ARTICLES	PROCESS	THOUGHT CONTENT	ALLIED SUBJECTS	COST
7	Napkin. Towels. Worn napkins.	Hemming and initialing, repair.	Appropriate materials to be used. Care of table linen and bed linen.		....
8–10	Rug or draperies.	Co-operative weaving.	(For some room in the school.) To gain a better understanding of manufacture of cloth.		
5–7	Cushion for window-seat or chair.	Upholstery.			
4	Covering for upholstered chair.	Hand- and machine-sewing.	Care and repair of upholstered furniture and mattresses.	Visit to mattress factory.	School furnishes material.
5	Dutch collar.	French embroidery.			0.25

Domestic Art.—Two one-hour-and-forty-minute periods a week.
Domestic Science.—Three fifty-minute periods a week.

MILLINERY AND DRESS-MAKING PERIODS	ARTICLES	PROCESS	THOUGHT CONTENT	ALLIED SUBJECTS	COST
2	Bandeaux.	Cutting and sewing on wire.	Line and form studied.	Art.	
10–12	Buckram frame covered with material and trimmed.	Making patterns, wiring, covering, and trimming, making bows, folds, ruches, etc.	Harmony of color demonstrated with pieces of material. Style of hats for special occasion.	Mathematics. Visits to millinery stores.	2.00–2.50
4–5	Remodelling.	Cleaning of frame and trimming.	Relation of money spent for hats to that of other clothing.		
12–14	Spring hat.	Construction of wire frame, covering with net or straw.	Duty on imported hats.	History of costume.	2.00–3.00
35–40	Graduation dress and hat to match or a summer suit.	Making lining for the waist (may be made separate if not wanted in the dress). Hand-made trimming.	Original design, judgment in buying material. Independence, self-reliance.		8.00–12.00

STUDENT PLAN, TEACHERS COLLEGE

Domestic-Art Course of Study for a Manual Training High School

This course of study in domestic art is plann d for a manual training high school in a Western town of a population of about sixty thousand. A large part of this population is made up of Germans who are comfortably well-to-do and home-loving people. The school, which is splendidly equipped in every way, is located in the central part of the city directly across the street from the classical high school and furnishes to the students of this classical high school whatever manual work they may elect to take as well as regular courses in the manual arts which are arranged for its own students.

Most of the girls who attend the manual training high school come from thrifty families with comfortable homes. About three-fourths of these girls remain at home after graduation and many of them eventually marry and have homes of their own. Of the remaining quarter, some go on to higher education, usually technical, some wishing to become teachers take normal courses, and others enter the trade or business world. Domestic art is taught in the seventh and eighth grades of the elementary school so that the girls on entering high school have some knowledge of the different stitches and their applications.

There are two teachers of domestic art in this high school. The average number of girls in a class varies from ten to fifteen, rarely exceeding fifteen.

AIM OF COURSE IN DOMESTIC ART

To help the girls to grow into well-rounded women who will be equipped to meet home and social problems in an intelligent and practical manner.

To develop in the girls a higher appreciation and enjoyment of beauty and harmony and to offer practical work which shall aid them in attaining this harmony and beauty in their own lives.

FIRST YEAR

Two One-and-One-half-Hour Periods per Week. Garment-Making, Household Decoration, and Millinery

APPLICATIONS	PROCESSES	THOUGHT CONTENT	CORRELATION AND RELATED INTERESTS	DISCUSSION
Corset - cover (made by hand to review stitches and processes learned in the grades).	Measuring. Altering patterns to measure. Cutting. Fitting. Making.	Habits of neatness and accuracy encouraged. Care of work and of tools. Good taste. Use of white ribbons or linen tape in underwear. Care of corset-covers; old ones brought from home and patched and mended.	English. Physical geography. Physiology.	Samples of different kinds of white materials suitable for undergarments and of different kinds of laces collected and arranged in notebooks to familiarize the girl with materials, their widths, prices, and names.
Draft of underskirt.	Taking of measures. Free pattern-cutting. Drafting.	Proportions of figure. Necessity for accurate work in measuring and drafting. Construction of skirt. Amount of fulness required. Division into gores. Goring.		This drafting is to be preceded by a general discussion on shirts and their construction, and by practice in free pattern-cutting.
White underskirt (machine-work).	Use of machine. Cutting. Fitting. Adjustment of	Machines, their construction, use, and care. Economical buying and cutting. Dif-	English. Physical geography.	Samples of materials such as gingham, heatherbloom, etc.,

	flounce. Adjustment of top.	ferent methods of finishing top, of setting on flounce. Textiles, their properties in relation to hygiene of underskirts. Care of underskirts. Comparison of hand and machine work.	Physiology. History. Drawing. Bookkeeping.	suitable for underskirts collected in notebooks.
Drafting and making of a pair of drawers.	Careful measuring. Free pattern-cutting. Drafting. Cutting. Making.	Economy in buying and cutting. Selection of durable material. Care in construction "opposite sides." Care of drawers, mending and patching. Consumers' League. Sweatshop labor.		After making the corset-cover, petticoat, and drawers, the girls estimate number of these articles required each year and their cost.
Household decoration. Hemming and marking of table-linen for domestic science department (co-operative work).	Napery hemming. Marking (padding). Satin stitch.	Selection and cost of good table-linen. Cotton made to look like linen through its finishing processes. Tests of real linen. Care of table-linen.		Samples of table-linen collected in notebooks. Study of linen, source, production, and manufacture.
Furnishing of the dining-room. Charts showing the kind of furniture and its	Arrangement of charts.	Furniture necessary for dining-room; good designs, cost. Good color combinations. Draperies, kinds and cost. Rugs, kinds and cost.	Visits to shops, furniture stores, and craft shops. Correlation with manual training	Samples of good draperies and wall papers. Pictures of good furniture and examples of good color schemes

FIRST YEAR—CONTINUED

APPLICATIONS	PROCESSES	THOUGHT CONTENT	CORRELATION AND RELATED INTERESTS	DISCUSSION
cost. Samples of materials used; color scheme of room, etc.		Wall finishes, kinds and cost. Floor finishes, kinds and cost. Pictures, good taste. (The artistic side of this is greatly emphasized because the Germans of this locality spend a good deal on their homes, but have extremely bad taste.)	in study of furniture, etc. Art, very close correlation and co-operation. Domestic science.	kept in the room continually. It is possible to secure the co-operation of the stores and neighborhood. A part of the exhibition-room is to be furnished as a dining-room. Study of linen, its sources, production, and manufacture.
Millinery. Renovation of spring and summer hats.	Sponging. Cleaning. Pressing. Dyeing. Bow tying. Trimming.	Cleansing of straw. Remodelling of shapes. Renovation of trimming. Relation of hat to wearer. Good color combination. Good lines. Care of millinery. Economy in dress.		

Two One-and-One-half-Hour Periods per Week. Garment and Dress Making, Household Decoration, and Millinery

APPLICATIONS	PROCESSES	THOUGHT CONTENT	CORRELATION AND RELATED INTERESTS	DISCUSSION
Millinery. Buckram bandeau. Paper pattern making.	Cutting from buckram. Sewing on wire. Cutting from paper, slashing and fitting to desired shape.	Good lines. Good color combination. Study of lines of face in their relation to lines of hat. Good taste in hats.	Geography, commercial and industrial. English, History. Physiology. Botany.	Pictures of hats good in line and color posted in room. Note-books to show samples of materials used and cost of hat.
Buckram frame made and covered with silk or velvet.	Cutting of buckram. Sewing on wire. Shaping. Padding of wires. Covering. Trimming. Lining.	Practice in trimming. Choice of trimming. Audubon Society. Economy in trimming. Life of different kinds of trimming.		
Garment and dress making. Night-gown.	Cutting. Making. Finishing.	Use and alteration of patterns. Economy in buying and cutting. Different ways of finishing top. Proper setting in of sleeves. Neat and accurate work. Care of work.		The study of cotton, its sources, production, and manufacture, is to continue throughout the work in garment and dress making.

APPLICATIONS	PROCESSES	THOUGHT CONTENT	CORRELATION AND RELATED INTERESTS	DISCUSSION
Tailored shirtwaist. Drafted pattern.	Drafting. Cutting. Fitting. Making. Finishing.	Proportions of human figure. Lines of shirtwaist. Drafting shirtwaist. Fitting, where and how done. Appearance of properly fitted waist. Economy of time. Economy in buying and cutting. Nice appearance of well-tailored shirtwaist. Joining of waist and skirt. Safety-pins tear clothes. Rings on waist and hooks on skirt give tidy appearance and save time and trouble in the end. Adjustment of sleeves. Adjustment of collar band, etc.	Physiology. Domestic science.	Collection of materials suitable for shirtwaists.
Simple cotton dress.	Designing. Buying. Cutting. Fitting. Making. Finishing.	Good design. Choice of color and line in relation to wearer. Suitability. Choice of material in relation to textile study. Use of patterns, altering of patterns. Care of	Visit to stores. Comparison of machine- and hand-made articles in price, etc.	Collection of samples that might be used for cotton dress.

		work; care of tools. Economy in buying and cutting. Development of skirt from simple pattern. Economy of time in planning work systematically and in having tools for work arranged in convenient manner. Remodelling of old cotton dress, as class problem for discussion. Correlation with art department, showing in sketch how this could be done. Economy in clothes.		
Household decoration. Dresser scarf, stencilled and embroidered. The bedroom. Its furnishings and decorations. Lectures, charts, and excursions.	Stencilling. Embroidery.	Good design. Good color combination. Value of artistic production. Lack of artistic element in machine-made articles of the day. Beauty of *simplicity* with good line and richness and beauty of color combination. Possibilities in application of stencil used on dresser scarf to other articles in the room. Individuality in decoration. Arrangement of bedroom. Good	Stencilling done in art class. Correlation with art in working out color schemes, etc.	Examples of good design and good color kept continually before the girls. Collection of drapery and bedding materials made by girls. Pictures of good furniture and examples of good color combination kept up in room.

APPLICATIONS	PROCESSES	THOUGHT CONTENT	CORRELATION AND RELATED INTERESTS	DISCUSSION
		furniture, its cost. Choice of hangings and rug, paper or wall finishes, pictures. Necessity for bedrooms which are healthful, restful, hygienic, and beautiful. The amount of time spent in bedroom and its effect on health of individual. Labor-saving devices in bedroom.	Correlation with domestic science in ventilation and care of bedrooms. Visits to furniture and craft shops. Manual training.	As far as possible exhibition-room furnished to show bedroom fittings. The imagination of the girls is to be developed as much as possible with a view to developing their individuality and originality.
Comforter made for hospital. (Co-operative work.)	Laying and tying of cotton.	Selection, care, and cost of bedding. Necessity for light bed-clothing. Care of bedding, mending.		

Two One-and-One-half-Hour Periods per Week. Garment-Making, Household Decoration, and Millinery

APPLICATIONS	PROCESSES	THOUGHT CONTENT	CORRELATION AND RELATED INTERESTS	DISCUSSION
Dressmaking. Very simple woollen dress.	Sponging. Cutting. Fitting. Making. Finishing. Pressing. Application of a bit of embroidery or braiding on waist for trimming.	Textile study in relation to choice of material for dress. Adulterations of wool. Economy in buying good material. Choice of style—good taste in color and design. Suitability. Use of patterns. Sponging of material. Care in cutting, marking, making, finishing, and pressing. Neat, accurate work. Economy of time and materials through wise planning. Hygiene of clothing. Care of clothing. Brushing, sponging, pressing, removing spots, hanging up, packing away for summer. New braids. Darning of dif-	English. History. Business arithmetic.	The study of wool, its sources, production, and manufacture, is to continue throughout this work in dressmaking. Collections of samples of woollen materials made by girls to familiarize them with names, widths, prices, etc., with a view to making them more intelligent buyers.

APPLICATIONS	PROCESSES	THOUGHT CONTENT	CORRELATION AND RELATED INTERESTS	DISCUSSION
		ferent kinds of tears. Remodelling of old clothes.		
Household decoration. Table-cover with appliqué. Decoration of living-rooms. Charts. Lectures. Discussions. Excursions.	Appliqué work. Embroidery.	Good design and color combination. Beauty in simplicity of line and harmony of color. More healthful, simple furnishings. Dangers and disadvantages of plush and much upholstery. Furniture, simple and *comfortable*. Wall finishes. Rugs. Draperies. "Bric-à-brac"—inartistic productions of present day. Windows and their treatment, inside and outside effect. Possibilities in inexpensive hangings, etc., decorated at home.	Co-operation with art class in working out color schemes. Designs for decoration, etc. Visits to shops. Manual training. Domestic science.	Pictures of good interior decoration kept up in room. Girls to make collection of such pictures also. Interest in good magazines. The love of work is to be developed in the girls as much as possible.
Curtains with design of darned net made for office. Co-operative work.	Making of curtains. Decoration and hanging.	Simplicity. Sanitation of curtains. Cleansing of curtains.		Collection of curtain materials and discussions of appropriate use of them. Pictures of good window draping.

Millinery. Lingerie hat, wire frame.	Wire-frame making. Embroidery. Covering of hat. Trimming.	Good design in embroidery. Relation of hat to wearer. Well-made frame necessary to well-wearing hat.		Outside and inside effect.

FOURTH YEAR

Two One-and-One-half-Hour Periods per Week. Dressmaking, Household Management, and Millinery

APPLICATIONS	PROCESSES	THOUGHT CONTENT	CORRELATION AND RELATED INTERESTS	DISCUSSION
Millinery. Renovation of winter hats. Silk dress with lining.	Sponging. Pressing. Cleaning. Altering of shape. Trimming. Buying. Cutting. Drafting. Fitting. Making. Finishing. Pressing.	Economy in dress. Possibilities of old hats. Good line and color combination in relation to wearer. Suitability. Economy in buying. Economy of time in planning of work. Suitability. Art in dress. Simplicity—good line and beautiful color. Relation of dress to wearer. Greater freedom in work.	English. History. Commercial geography.	The power to do original thinking is to be specially sought for in this grade. The study of silk, its growth, production, and manufacture, is to continue throughout this work on the silk gown. A collection of silk samples is to be

APPLICATIONS	PROCESSES	THOUGHT CONTENT	CORRELATION AND RELATED INTERESTS	DISCUSSION
		Dress as the expression of individuality. Healthful, comfortable clothing. Care of clothing. Cleansing of silk. Customs duties on imported gowns. Influence of women on industry.		made by the girls so that they may become familiar with the different kinds of silk, the widths, prices, etc.
Household management. Lectures. Papers. Charts. Discussions.		Apportionment of the budget. Keeping of accounts. Living within one's means. Saving. Choice of home. Arrangement of home. Business connected with home. Care of home and its furnishings. Spirit and ideals of home and their influence on its inmates. Dignity and beauty of home-making. Economy of time and energy in systematic methods of living and working. Necessity of *system*.	Chemistry. Domestic science. Civics. Political Economy. Manual training.	In this year the girl is to be helped to understand more fully her duties and responsibilities as a part of the social unit. She should realize her influence on industry as a consumer. Her interest in many social and industrial questions of the day should be awakened.

		Care of clothing. Brushing, marking, sponging, repairing, pressing, storing. Remodelling of clothing. Planning of wardrobes with expenses for (1) girl in comfortable circumstances, living at home. (2) For business girl with $60 per month. (3) For mother of a family.		Her originality, imagination, and powers of invention should be greatly stimulated.
Millinery. Straw hat (wire frame).	Wire frame. Making. Sewing straw braid. Trimming.	Audubon Society. Suitability—good design. Straws, their prices and wearing qualities. Hair-dressing. Good taste.		
Child's outfit for orphan asylum. (Co-operative work.)	Cutting. Making.	Use of patterns. Necessities of a child's wardrobe. Construction of garments. Expense of children's clothing. Hygiene, suitability. Practical charities. Social consciousness developed.		

Domestic-art work in the technical high school courses should differ from the manual training in that it should offer not so great a variety of hand-work for each student, but allow opportunity for intensive work along some particular line of interest, such as dressmaking, millinery, costume designing, etc., at the same time allowing opportunity for some academic work to be pursued. The plans for real technical work in high schools seem to differ with leading authorities. The Washington Irving High School in New York offers some of the best technical high school work for girls given in this country. As yet the technical lines of specialization are not many in number, but those offered lead the students into many fields of work. Commercial courses and library assistance, specialization in various fields of art such as designing and sketching for wall papers, textiles, stained glass, and cataloguing, dressmaking and millinery, present a number of opportunities for selection.

Technical high school work.

There are many fields for specialization in the household arts work which have not as yet been appreciated by controlling boards and which in the future will give women an opportunity for means of

livelihood. The technical courses offered in high school may lead later to higher technical schools for women. At present few are established. The Household Arts School of Columbia University, Pratt Institute in Brooklyn, and Simmons College in Boston offer such opportunity for further study.

The technical high school course of study is generally three or four years in length, and about two-thirds of the periods are devoted to the special technical line of interest. The academic studies will be of most value in such a school when they are distinctly related to and correlated with the lines of thought of these special fields. The work of the first year will naturally be the least specialized, for as a rule the student must get her bearing and discover her peculiar interest. Opportunity should be given, however, in elective periods for those who have early discovered their dominant line of interest. So-called technical high school courses are often offered at night, but sometimes fail to make the work as intensive as that given in day courses, and offer no academic studies in connection. Such courses would better be called continuation courses, or home-maker's courses, rather than technical high school work.

The following outline of one specialty—dressmaking—for the technical high school will give some idea of the kind and degree of intensity of work which should be offered in a technical course. Similar courses along the lines of costume-designing, commercial branches, designing for other special fields, millinery, etc., should be offered. The academic work should be closely related and correlated with the special line of interest. The following course is planned for three years. It might extend over four, or additional work be added, if the high school course is of four years' duration.

COURSE OF STUDY IN DRESSMAKING FOR A TECHNICAL HIGH SCHOOL

STUDENT PLAN, TEACHERS COLLEGE

I. CONDITIONS.

(1) *Population.*—200,000.

(2) *Nationalities.*—(*a*) American, very largely.

(*b*) Foreign. Outside the original American stock the German and Irish elements predominate. Of the 35,000 wage-earners employed in manufacturing, over 30,000 are of American birth.

(3) *Industries.*—(*a*) Importance. Occupies sixth place in manufacturing in proportion to population in the United States. The geographical centre of the workshop of the United States.

(*b*) Articles manufactured and produced. Shoes, clothing,

photographic supplies, canned goods, buttons, optical goods, flour, fruit products, seeds, chairs, nursery stock, office and telephone supplies, carriages, lithographing, machinery, etc.

(4) *Labor.*—A high percentage of the labor is skilled and commands a higher price than in most cities and demands a higher order of intelligence because of the skill required and the diversity of articles manufactured. Owing to this preponderance of skilled workmen the standard of intelligence throughout the city is high, and there is a small percentage of illiteracy and of foreign-born residents as compared to other cities.

(5) *Civic.*—(*a*) Spirit. The citizens possess to a high degree a spirit of local pride and civic loyalty, which is manifest in city improvements, parks, public buildings, etc., and also in the schools.

(*b*) Residential section. It is so situated that it has become one of the handsomest residence cities of America. There is no special district devoted to manufacturing enterprises. The factories are as scattered as their products are diversified. Naturally, this scattering of families has tended to scatter the workingmen of the city and prevented congestion of the houses in any single section of the city. There are no slums as compared to other cities and few large crowded tenement houses.

(*c*) Environment. It has many parks, and its suburban sites and natural environment tend to make the life of the workingman pleasant and healthful and have tended to elevate the character of the workingman as a class.

(6) *Educational.*—(*a*) Public institutions. There are thirty-eight public schools and two high schools; also a number of evening schools in the various parts of the city where they are most needed. Factory schools have recently been started, but so far instruction is only for boys.

(*b*) Private institutions. Eighteen parochial schools, a uni-

versity, and theological seminary. (*a*) A Mechanics' Institute which trains boys and girls, and men and women, for useful trades.

(*c*) Scope. These institutions give ample opportunity for securing a common school and classical education.

(7) *Industrial Training.*—The existing high schools give an indispensable preparation for high professional study and still more immediate preparation for business pursuits, but they do next to nothing to fit their pupils for the fundamental industries. About thirty per cent of the number in the grades go to the high school. There is, therefore, need of practical instruction in the high schools so that, when the pupils leave the school, they will not have to resort to other means to get what they must know in order to go out into the business world successfully. There is need of high school technical training in this city.

II. Aims.

(1) *General.*—(*a*) To give a practical training in the high school, which will produce practical results for girls, who in the majority of cases are soon to be put to the necessity of applying their learning to the practical affairs of life.

(*b*) To train the girls in the fundamentals and provide special trade instruction commensurate with the demands of a manufacturing city.

(*c*) To encourage girls to become self-supporting and to lead useful, happy, dignified, and progressive lives.

(2) *Specific.*—(*a*) Formation of right habits. (1) To encourage habits of honesty, neatness, attention, accuracy, love of work, speed, promptness, economy of time and material. (2) To develop reasoning, originality, invention, imagination, and ability to express an idea in concrete form. (3) To inculcate politeness, kindliness, and pleasing manners.

(*b*) Home management. (1) To encourage neatness and orderliness in the home and promote a love for it. (2) To teach economy in buying and the use of materials and a judicious use of time. (3) To cultivate judgment and skill in the use of tools and selection of materials. (4) To develop good taste and promote a desire for beautiful, harmonious, simple, and restful surroundings. (5) To lead to consideration of physical conditions.

(*c*) A preparation for trade. (1) Care and use of utensils, and skill in handling same. (2) Economy of time and material. (3) Ability to make and interpret working drawings and patterns. (4) Some knowledge of trade and every-day business transactions. (5) Some practical information of the names, use, fitness, etc., of the tools to be used in their trades, and the materials handled.

DRESSMAKERS' COURSE—FIRST YEAR

(*Required Course*)

Time.—Five periods per week for one half year. Periods, fifty minutes each.

NOTE.—This course is preceded by an elementary school course of four years, in which the leading fundamental principles and stitches used in hand-sewing are given. There has been some garment-making by hand, a little free pattern-cutting, and the use of patterns, but no drafting. So far in the course machine-work has not been introduced.

I. PROBLEMS.

(1) Machine. (*a*) Work-bag.

(*b*) Apron.

(*c*) Underskirt. White muslin.

(*d*) Night-gown.

(*e*) Shirtwaist. Plain.

(*f*) Between work. (1) Short skirt. (2) Corset-cover.

(*g*) Shirtwaist. Tucked. This problem is designed for the girl who finishes the first five problems before the time of the term expires.

II. Principles and Processes Involved.

(1) Care and use of machines. (*a*) Kinds. (1) Single-thread. (2) Double-thread.

(*b*) Threading, treadling, oiling, parts, etc.

(2) Drafting.

(3) Cutting.

(4) Fitting.

(5) Stitching.

(6) Designing.

(7) Decoration. (*a*) Tucking.

(*b*) Ruffling. (1) Calculating fulness. (2) Joining, etc.

(*c*) Hemstitching.

(*d*) Lace and embroidery. (1) Mitering. (2) Curving. (3) Joining.

(8) Seams. (*a*) French.

(*b*) Flat fell.

(*c*) Tailor.

(9) Hems.

(10) Facings. (*a*) Straight.

(*b*) Bias.

(11) Fastenings. (*a*) Buttons and button-holes.

(*b*) Tapes.

(*c*) Ribbons.

(12) Sleeve-making. (*a*) Finishing. (1) Tailor cuff. (2) Placket. (3) Putting in, gathering, etc.

(13) Practice in using commercial patterns.

(14) Adaptation of patterns to figure.

(15) Study of form and line as applied to individual figures.

III. Related Subject-matter.

(1) Design. (*a*) Trimming of garments with lace and hand-embroidery.

(*b*) Space relation. (1) Study of line. (2) Breaking up spaces to give long effects, short effects, etc.

(*c*) Proportion.

IV. Thought Content.

(1) Use of machines. (*a*) Economy of time.

(*b*) Strength of sewing.

(*c*) Value in trade.

(*d*) Beauty in fine stitching.

(*e*) Comparison of machine- and hand-sewing.

(2) Materials. (*a*) Suitability. (1) Fitness as to use. (2) Wearing qualities. (3) Laundering qualities.

(*b*) Cost.

(*c*) Good taste. (1) In selection. (2) In decoration.

(*d*) Economy in use of materials.

(*e*) Combination of materials.

(3) Garment-making. (*a*) Choice of materials.

(*b*) Undergarments to correspond to outer garments.

(*c*) Estimate cost of complete garment and time required to make each.

V. Outside Interests, Talks, Excursions, Etc.

Note.—One period of fifty minutes each to be set aside each week for talks, excursions, visits, etc. This time may be used for demonstration of some thought to be brought out in connection with garment-making. Otherwise the time is to be spent in discussion of following topics. These may be subdivided and extended over more than one period at discretion of teacher. Each teacher to decide as to topics most needed by her individual class.

(1) The keeping of accounts. (*a*) Advisability, use, etc.

(*b*) Each girl to be required to keep an account of her expenditures for one month.

(*c*) Lead girl to see where in her individual case the money could have been more wisely spent.

(*d*) Economy of time as opposed to money.

(2) Problems dealing with the purchase of materials. (*a*) Relations of consumer and dealer.

(*b*) Relative values, bargains, etc.

(*c*) Comparison of samples brought in by girls; use of price lists; learn names and widths of materials.

(*d*) Some means of judging materials.

(*e*) Use of lists in shopping.

(*f*) Shopping etiquette; how to ask for what you wish.

(3) General appearance. (*a*) Good taste. (1) Color combinations. (2) Textile combinations. (3) Suitability of garment to occasion.

(*b*) Good and bad hair dressing. (1) Hair ribbons, ornaments, combs, etc.

(*c*) Ornamentation. (1) Use of cheap jewelry. (2) Cheap laces, embroideries, etc.

(*d*) Shoes. (1) Well cleaned. (2) Heels in good condition.

(*e*) Gloves. (1) Clean, well-mended.

(4) Hygiene. (*a*) Care of the body.

(*b*) Hands. (1) Nails—clean, well-shaped. (2) Necessity for business woman to have good-looking hands. (3) Care—soaps, brushing, etc.

(*c*) Selection of garments that will launder easily.

(*d*) Frequent changes of underwear. (1) Necessity in shop-work; use in this connection of knit, one-piece underwear.

(5) Excursions, etc. (*a*) Visits to neighboring stores in relation to shopping, etc.

(*b*) Exhibit of undergarments in connection with making of undergarments.

DRESSMAKERS' COURSE—SECOND YEAR

(*Required Course*)

Time.—Fifteen periods per week throughout year. Periods, fifty minutes each.

I. Problems.

(1) Construction. (*a*) Shirtwaist (cotton or linen, tucked).
(*b*) Kimono.
(*c*) Unlined cotton dress.
(*d*) Shirtwaist (fancy tucked, lace-trimmed).
(*e*) Silk petticoat.
(*f*) Plain tailored skirt.
(*g*) Gymnasium suit.
(*h*) Tight-fitting lined waist.
(*i*) Simple wool dress.
(2) Drafting. (*a*) Shirtwaists.
(*b*) Close-fitting waists.
(*c*) Sleeves.
(*d*) Collars and cuffs.
(*e*) Skirts. (1) Gored (seven, nine, eleven). (2) Circular (plain and gored). (3) Plaited.
(3) Adaptation of bought patterns to fit individual needs.

II. Principles and Processes Involved.

(1) Drafting.
(2) Cutting.
(3) Tracing.
(4) Marking.
(5) Basting. (*a*) Running.
(*b*) Tailor.

(6) Seams. (*a*) Kinds. (1) Welt. (2) Flat stitched. (3) Strapped. (4) Lapped. (5) Slot.

(*b*) Finishing. (1) Overcast. (2) Bound. (3) Turned in.

(7) Boning.

(8) Pressing.

(9) Pockets.

(10) Making of button-holes.

(11) Sewing on hooks and eyes.

(12) Hanging skirts.

(13) Finishing skirts.

(14) Decorating. (*a*) Machine. (1) Hemstitching. (2) Tucking. (3) Stitching. (4) Ruffling.

(*b*) Hand. (1) French embroidery. (2) Coarse stitches.

(*c*) Trimmings for gowns. (1) Smocking. (2) Cording. (3) Plaiting. (4) Braiding. (5) Application of previously learned stitches to collars, belts, cuffs, shirtwaists, etc.

(15) Study of line and form to fit individual figures. Adjusting garments to variety of figures. Much practice in taking measures.

III. Related Subject-matter.

(1) Design. (*a*) Space relation.

(*b*) Proportion.

(*c*) Relative values.

(*d*) Color harmonies.

(*e*) Sketching. (1) Waists, gowns, and shirtwaists.

(2) Commercial and industrial geography.

(3) Commercial and industrial history.

IV. Thought Content.

(1) Materials. (*a*) Cost.

(*b*) Economy in use and cutting.

(*c*) Good taste in selection.

(*d*) Wearing qualities.
(*e*) Suitability to garment.
(2) Garments. (*a*) Appropriateness.
(*b*) Economy in planning a wardrobe.
(*c*) Combination of textiles.
(*d*) Combination of colors.
(*e*) Independence of draft and workmanship.
(*f*) Utilities and varieties of shirtwaists.

V. Textile Study.

Note.—Twenty lessons during the year to be given on textiles. If possible, class to visit a silk or cotton or woollen mill in the vicinity of the school.

Aim.—To give a practical understanding of the various textile fibres and the processes of their manufacture, that shall lead to judgment and taste in selection as suited in wearing quality, adaptability to use, permanence of color, and harmony of design to the particular use for which they are intended.

(1) Development and preparation of fibres. (*a*) Spinning. (1) Early history. (2) Processes. (3) Comparison of old and new methods.

(*b*) Weaving. (1) Movements. (2) Early forms. (3) Looms.

(*c*) Weaves and kinds of cloths in which used. (1) Twill. (2) Plain. (3) Rib. (4) Basket. (5) Satin.

(2) Cotton. (*a*) Distribution and production, influence on cost, quality, etc.

(*b*) Steps of manufacture through milling.

(*c*) Products of milling.

(*d*) Seed products.

(*e*) Properties. (1) Wearing qualities. (2) Adaptations to use. (3) As substitute in other textiles.

(*f*) Prices.

(3) Flax. (*a*) Production.
(*b*) Processes.
(*c*) Properties.
(*d*) Adaptations to use.
(*e*) Materials made from flax.
(*f*) Wearing qualities.
(*g*) Price as compared with cotton.
(4) Silk. (*a*) Countries producing.
(*b*) Milling operations.
(*c*) Characteristics.
(*d*) Wearing qualities.
(*e*) Artificial silks.
(*f*) Mercerized materials.
(*g*) Price as compared with other textiles.
(5) Wool. (*a*) About the same as for other textiles.
(*b*) Cleansing properties, shrinkage, etc.
(*c*) Utility for warmth.
(*d*) Adulterations.
(6) Dyeing. (*a*) Effect upon fibres.
(*b*) Fast and fugitive colors.
(*c*) Chemicals used, mordants, etc.

DRESSMAKERS' COURSE—THIRD YEAR

(*Required Course*)

Time.—Fifteen periods per week throughout year. Periods, fifty minutes each.

I. Problems.
(1) Pattern modelling and draping. (*a*) Tight-fitting lining.
(*b*) One-piece dress.
(*c*) Sleeves, collars, guimpes, and yokes.

(2) Construction. (*a*) Hand-sewing. (1) Baby's underskirt; some hand-embroidery. (2) Baby's dress.

(*b*) Machine. (1) Silk or wool shirtwaist. (2) Princess tight-fitting boned lining (of silk or material suitable for lining wool gown). (3) One-piece wool dress (to be used over princess lining). (4) Guimpe of silk, lace, and net, decorated with fancy stitches. (5) Simple silk or wool dress to be used with guimpe. (6) Linen suit (gored skirt and coat). (7) Inexpensive cotton or wash dress. (8) Remodelling of an old gown. (9) Freshening of old waists, gowns, suits. (10) Graduation gown. (11) Between work (hand-made lingerie waist using tucks, lace, and hand-embroidery). (12) Order work. (*a*) Lingerie (*b*) Baby's garments and pillows (*c*) Shirtwaists and cotton dresses.

II. Principles and Processes Involved.

(1) Largely review of principles and processes learned in first two years of course.

(2) Skirts. (*a*) Lining. (1) Drop. (2) In one piece with waist lining.

(*b*) Finishing. (1) Braid or velveteen.

(*c*) Fastenings. (1) Hooks and eyes. (2) Snaps. (3) Buttons and button-holes.

(3) Coats. (*a*) Binding inside seams.

(*b*) Pressing.

(*c*) Pockets.

(4) Shop methods. (*a*) Tests in workmanship. (1) Standard set by factory and trade.

(*b*) Tests in speed.

(*c*) Piecework.

(*d*) Order-work.

(5) Practice in modelling gowns on figure.

(6) Adjusting garments to individuals.

(7) Drafting waists to different measures. Taking measures of members of class until familiar with draft and its application to other garments.

(8) Study of design, color, proportion, etc., as related to garment-making.

III. Related Subject-matter.

(1) Design. (*a*) Costume.

(*b*) Decorative.

(*c*) Color harmony.

(2) Commercial and industrial history.

(3) History of costume.

(4) Commercial arithmetic.

(5) Drawing and sketching.

IV. Thought Content.

(1) Materials. (*a*) Varieties; suitability for use in garments.

(*b*) Texture and wearing qualities.

(*c*) Color combinations.

(*d*) Suitability of material to individual.

(*e*) Cost, widths, etc.

(*f*) Care of garments. (1) Cleansing and taking out spots. (2) Taking off shine and worn appearance. (3) Mending and pressing.

(2) Preparation for trade. (*a*) Keeping of accounts.

(*b*) Estimating cost of garments. (1) Ability to do so quickly.

(*c*) Estimating amount of time required to make certain garments.

(*d*) Keeping time accounts.

(*e*) Business-like manners and ways of working.

(*f*) Independence of workmanship.

DRESSMAKERS' COURSE—THIRD YEAR

(*Required Course*)

Household Management and Home Furnishing

Time.—One period per week throughout year. Periods, fifty minutes each.

Aim.—To improve the home conditions as far as possible by discussions and practical demonstrations of the following topics.

I. Problems.

(1) Economic aspect of study of the home. (*a*) Labor. (1) Organized. (2) Systematic. (3) Regular times for doing certain tasks. (4) Economy of time and energy by careful planning. (5) Sharing of responsibilities. (6) Division of labor.

(*b*) Home industries. (1) Ethical value. (2) Economic value.

(*c*) Income. (1) Division according to value and necessity. (2) Keeping of accounts. (3) Importance of wise spending. (4) Relation of spender to community, to family, to quality of commodity purchased, to condition of business. (5) Elements which regulate apportionment of income. (6) Use of business methods in the home. (7) Some ideas of banking, checking, drafts, etc.

(2) Furnishing of the home. (*a*) Fundamental principles of good furnishing. (1) Effect of furnishings upon health, comfort, and development of family. (2) Artistic furnishings as well as hygienic. (3) Choice of materials as to color, suitability, design, wearing qualities.

(*b*) Care of rooms. (1) Weekly sweeping and dusting—best methods. (2) Lighting. (3) Heat and ventilation. (4) Sleeping-rooms. Bed furnishings and removal of soiled clothes, etc. (5) Use of disinfectants and deodorants.

II. PROCESSES.

(1) Largely class discussions.

(2) Free use of charts.

(3) Let class plan ways of dividing income.

(4) Practice in keeping accounts.

(5) Some practice in making out checks, drafts, etc., with relation to banking, trade, etc.

(6) Visit if possible a good model apartment.

(7) Plan good division of daily household tasks.

DRESSMAKERS' COURSE—SECOND OR THIRD YEAR

(*Elective Course*)

Time.—Five periods per week throughout year. Periods, fifty minutes each.

Prerequisite.—Dressmakers' course first year.

Aim.—To enable girls to earn money at home making undergarments for private trade. This course is for a girl who will be needed at home part or all of the day, and yet have sufficient time to enable her to help in the support of herself or family. In most large cities there is ample opportunity for the employment of such girls, and need for their training.

I. PROBLEMS.

(1) Combination of hand- and machine-work. (*a*) Corset cover. (1) Plain. (2) Lace-trimmed.

(*b*) Chemise. (1) Hand-embroidered.

(*c*) Underdrawers. (1) Ruffle trimmed with machine-tucks or hemstitching. (2) Ruffle of lace or embroidery.

(*d*) Combination drawers and corset-cover. (1) Tight-fitting and very plain.

(*e*) Night-gowns. (1) Plain. (2) Lace-trimmed or hand-embroidered.

(*f*) Underskirts. (1) Plain (ruffle of same material trimmed with machine tucking). (2) Fancy (ruffle of embroidery with heading of beading, or lace-trimmed).

(*g*) Kimonos and dressing-jackets. (1) Daintily trimmed with lace, etc. (2) This problem is for those finishing the first six problems before the time of the term expires.

II. Principles and Processes Involved.

(1) Review of principles and processes as planned for first year course.

(2) Extra stress laid on the finishing and decoration of garments.

III. Related Subject-matter.

(1) Same as for first-year course.

IV. Thought Content.

(1) Materials.

(*a*) Cost.

(*b*) Suitability as to use.

(*c*) Laundering and wearing qualities.

(*d*) Trimmings adapted to various qualities of materials.

(*e*) Fitness of decoration (hand) to material and garment.

(2) Garment-making.

(*a*) Various shapes and kinds.

(*b*) Suitability as to age and size.

(*c*) Economical use of cloth.

(*d*) Estimation of cost.

(3) Suggestive exercises.

(*a*) Training in quickly estimating cost of a finished garment with relation to trade.

(*b*) How to take orders for garments.

(*c*) Keeping of time accounts.

(*d*) Estimate cost of making garment as to time required.

(*e*) Quick drill in designing and suggesting ways of making undergarments.

Domestic art in trade schools.

The trade schools for women in this country are few and have a distinct aim. They have been until recently under private management and largely experimental. The aim is to train the young wage-earner for a short period in order that a certain amount of skill may be developed before she enters a trade, and that she may have an appreciation of the relationship of this trade to other work of the world. This cuts short the long apprenticeship period through which many of the girls must pass if they enter the shop or factory as soon as their working papers are obtained. The girls in such a school are naturally young, poor, and often in bad health. They cannot stay long in such a school and the course is often accomplished at great sacrifice. Such a school should aim to give the girl a knowledge of the fundamental laws of

health, all the technical skill and speed along the line of some specialty which time will permit, and as much of an outlook on the business and related interests of that specialty as possible. The Manhattan Trade School for Girls in New York aims to accomplish this purpose. At present there are but four specialties offered—hand-sewing and dressmaking, millinery, machine-operating, and pasting. The course of study in such a school is necessarily short, but leads directly to work. This school is open to girls who have left the elementary school because they are either graduated or have passed the compulsory school age. The physical training is a distinct part of the work of each day, as well as the academic features of study which give the girls an opportunity to learn to write a business letter, to reply to an advertisement, or to gain some knowledge of the origin and manufacture of the various textiles handled. The art work is also closely related and has a strong cultural value as well.

The Hebrew Technical School for Girls of New York is a higher type of trade school and may be placed in a distinct class between such work as that offered in the Manhattan Trade School and that of the technical high schools. This course differs from

the above in that it takes mainly graduates from the elementary school, while the Manhattan Trade School admits girls who have obtained their working papers whether they have completed all or only part of the elementary school work. The consequence is that one finds a higher type of scholarship in the latter school. The course is only eighteen months in length, but is continuous. The girls are given much more instruction in academic work than in the Manhattan Trade School and there is also training in housekeeping. About two-thirds of the time is devoted to technical work including design. Opportunity is given for election of the commercial course, or work in manual training, which means specialization in sewing and dressmaking. Opportunity is also given for some trade experience, as orders for garments are executed by this department. The graduates from this school enter business as stenographers, and bookkeepers, or as dressmakers' assistants. Some remain at home and a few go on to higher schools.

The Boston Trade School for Girls is similar in organization to the Manhattan Trade School and offers an opportunity for the study of this phase of domestic-art work.

The catalogues of these schools will illustrate the amount of time devoted to the special lines of interest as well as to academic work.

The evening and day classes of the Young Women's Christian Association, and the industrial classes of church schools and settlements, as well as the public evening high schools, all offer a certain type of domestic-art work. Much of this may be classed as of secondary nature in that it offers opportunity for students to continue courses of study along these lines while engaged in business pursuits. These courses of study are most like the continuation classes of the foreign schools, but as a rule do not offer as good trade instruction as those abroad, where the courses offered at night aim to supplement the trade in which the workers are engaged. These schools and settlements also offer courses in domestic art which are not as highly specialized and may be better termed home-making courses, in that the aim is to offer such work as will make the girl more efficient in her home. They are as a rule short in length and offer instruction in dressmaking, millinery, embroidery, and garment-making.

One difficulty which should be guarded against by those in authority in these schools is the misin-

terpretation of aims of courses by those entering. The writer has known of young girls placed in the home-making courses who really desired more technical instruction and who were disappointed because at the completion of the course it was impossible to find work as a milliner's or dressmaker's assistant. The aims of courses should be distinctly stated, and advanced as well as elementary work offered in both the home-maker's and trade sections of the domestic-art work.

Catalogues of Christian Associations and settlements will illustrate the courses offered by these organizations.

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PART IV

DOMESTIC ART IN HIGHER EDUCATION

CHAPTER XII

DOMESTIC ART AS A PART OF COLLEGE TRAINING FOR WOMEN

HOUSEHOLD arts work as a part of college training for women is being introduced in many of the Western State and agricultural colleges. It is gradually winning its way against the old-time conservatism which made a college course for women exactly parallel to that for men. The changes which have come about in college courses for men are bound to affect those for women and eventually relate the work more directly to the life which the woman will enter after leaving college. The Eastern colleges for women are slow to adopt such a course, but before many years they will feel the necessity of offering what the students will demand and of readjusting their courses of study

Introduction of household arts in state and agricultural colleges.

so as to meet the needs of girls interested in the home and its beautifying, organization, and improvement. The majority of college women are far from practical, and few see the real relationship of the arts and sciences studied at college to the practical affairs of life. The writer believes that college women would marry earlier in life if their interests were enlisted in the study of the problems directly connected with home-making; there can be nothing more interesting for the average normal woman. If the well-trained, intelligent college women, the leaders of affairs in the world's work for women, would give their thoughts and energy to solving the problems of domestic science, proper food, proper clothing and shelter—in fact, "right living"—with the least amount of expenditure of time, energy, and money, the study would not only be interesting to them, but benefit humanity more than years of study of Greek and Latin classics, for it stands for economy of health as well as economy of wealth. The college woman is beginning to feel this and to make her demands. It is only in very recent years that any provision has been made in colleges for the women who wished or were compelled to make teaching their life-work. The women were filled with sub-

ject-matter and graduated and expected to know intuitively how to present all the college subjects. Many college women go into the teaching field in this way utterly unprepared to present their subjects intelligently. The fact that many of the superior ones feel their lack of proper preparation is evidenced by the statistics of normal training schools, where these women register for study in education and methods of teaching.

Colleges slow to provide for those who must seek livelihood.

The college for women, of the past, has made no provision for training women who must seek some means of livelihood after graduation, other than to point the way to the teaching field. The world offers so many fields to college women of to-day that the least the college can do is to open up the possibilities and give some opportunities for specialization. Surely by the time a woman reaches college, her dominant interests should have been developed or she should at least begin to take an interest in what they are likely to be.

Household arts education is not very old. It has been a part of our educational schools for only twenty years—in some places it is not yet incorporated as a part of the general curriculum. That the colleges

Conservatism prevents introduction of household arts.

are slow to adopt it is due largely to the old-time conservatism and lack of understanding of the real meaning of "cultural"—for it has been claimed that the college courses must be cultural. Regarding the proposed college course in home economics of the Lake Placid Conference, Dr. Balliet said: "The work mapped out has as high cultural value as the best courses now given in college, if we must keep on contrasting the 'cultural' and the 'practical,' as if they were mutually hostile to each other. Some day—several thousand years to come—when spectacled professors shall study 'American antiquities,' all these 'common' 'practical' processes—the ways of cooking meals, manufacturing clothes, etc.—will be 'cultural' subjects on which learned courses of lectures will be given, and which will be accepted as proper subjects for theses for the degree of doctor of philosophy. . . . Somehow, according to college students, knowledge must have a certain age before it becomes 'cultural.' When it is so far behind the time that it ceases to be practical, then it becomes cultural."

College authorities often have a singular method of differentiating between the value of studies in the curriculum. Mrs. Ellen Richards once said: "The

housing of the poor is already allowed as a college course. Why not the housing of college students? We have condescended to study the slums, it is time we studied ourselves."

Importance of the home as a study.

To this might be added not only the study of ourselves in relation to shelter, but also in regard to proper food and clothing, the administration of our homes and the care and nurture of our children. There can be no more important college subject than the home. It covers the earth as far as fulness of subject-matter is concerned, and all the arts and sciences may be applied to home practices. In this age and era of education, the practical must be reckoned with by all who are planning courses. The home stands as the very centre, in training for the upbuilding of character or for good citizenship; and if this efficiency is the aim of the education for women, then the home subjects must be better represented in our college courses.

Difficulties before those introducing household arts.

There have been many difficulties which those interested in the introduction of household arts work into colleges have had to face. Perhaps the old-time conservatism mentioned above has been the most diffi-

cult. This will soon pass away when those interested in this field of work are able to present the subjects in such a manner as to appeal to college authorities. There may be objection at first to the introduction of any practical work, but at least some subject-matter may be presented in lecture courses and an introduction given to this field. It very often happens that high school girls preparing for college have no opportunity for the study of household arts, since their courses of study must be governed to a great extent by the college entrance requirements. A girl who fails to get this work in high school naturally goes through college with no knowledge of the practical affairs of the home, and if she is at college away from home there is no opportunity for her to come in touch with the practical things of life. The results are often truly pitiable. The author has known a good many such girls and they have made a strong appeal to her for some knowledge of the practical. As one girl remarked, "If I only knew how to make my own shirtwaists and summer dresses and trim my own hats, what a saving it would mean to father! And all I can cook is fudge." This came from a girl of fine mind, a graduate of one of the Eastern col-

leges for women, perfectly prepared in mathematics and interested in her subject, but totally ignorant of home affairs. This girl is one of the marrying type. What results are likely to follow! She must meet the practical affairs: they are inevitable. She will be obliged to learn through sad experience in a more or less painful way and at the sacrifice of her own health, time, energy, and money, as well as that of her family. She is only one of many such girls who must face the home problems. The fact that colleges have not recognized for credit the high school work in household science has greatly hindered the development of this work in both college and high school. The time is almost here when college entrance boards will accept for credit certain courses given in household arts in the high school. The fact that it has not been credited in the past is due to poor teaching rather than to insufficient value in the subject-matter. Some associations for college entrance are showing interest by requesting the formulation of possible schemes of work for credit.

Meeting the practical affairs of life is inevitable.

Another difficulty has been the lack of properly trained teachers to present this work. It is only very recently that women with college degrees have

become interested in the household arts work. Many have previously considered it undignified and have turned from it to other fields of teaching. We must have our instructors in literature and the classics in order that our girls may know this field of spiritual possession, but we need strong women to take an interest in the development of the home subjects as well. Each year produces a few more and the time will surely come when we shall have competent instruction for college work in home economics. The field is very broad and the opportunity very large for any one who will prepare herself for this work. Housekeeping and home-making are certainly a profession, and intelligent, thoughtful preparation must be demanded from those who are to present this subject to the next generation, for their health and happiness are at stake.

Other difficulties.

Another difficulty is the readjustment of subject-matter in order that this work may find a place. This is easily managed when the authorities are interested and face the value of this work. The arrangement of periods, the opportunity for courses in applied science instead of all pure science work, the chance for elective courses, make possible the

introduction, if there is a willingness to have it in the curriculum.

Possibilities in college courses for women.

There are many possibilities in relation to subject-matter on both the artistic and scientific sides of home management and study. In relation to the domestic-art work there are many phases suitable for college. The economic side of clothing and shelter offer opportunities in connection with a general course in college economics. Woman as spender—what should her knowledge be of materials, their manufacture; how to purchase and regulate her expenditures; how to judge of the wage and demands made of the worker or seamstress? Should she know and study the relative expenditure for gowns, shoes, hats, gloves, as well as household furnishing? Should she be taught to think of economy of time, money, and energy in order that she may have time to enter into philanthropic study and service?

The home as a sociological study offers opportunity for courses in this field—the family, the home-maker, true and false standards of living, luxury, relationship of members in the home, the true home spirit.

From an artistic point of view much of interest can be offered—the history of architecture, and of

the various periods of decoration; history of tapestries, and of other textiles; Ruskin and Morris and their influence on art and its development; the history of costume and evolution of dress. Work in practical design should be offered in connection with such a course.

Some practical work in the study of materials, their composition and adulteration, will prove of interest and value in college work. The standardizing of textiles may be brought about when women have an intelligent understanding of their composition and can judge between values; this will lead naturally to a demand for proper labelling and representation of their composition. Some practical work in garment-making may well find a place in a college course if the girls have had no high school instruction in sewing. The work should be of value and adapted to the needs and interests of the students.

These arguments for the introduction of household arts work into the college have been made because the home is the dominant interest in the lives of most women. The writer has not lost sight of the other college courses which the woman if well educated should surely have—those studies in

literature and language which make for freedom of spirit and help in developing the imagination and world of thought and feeling. These should not be neglected when a woman leaves college, but should be the foundation for her later study and development. The difficulty, however, in so many homes is that the women are hampered by their so-called home duties and have little or no time to soar into the realms of literature or art. This is nearly always due to a lack of understanding of relative values and of economy of time in home management. Household arts and economics should stand for simplicity in material things so that there will be time for other life-interests. If the college woman knows nothing of household economics, how can she be free from the dominance of things? If she knows nothing of the resources of modern science, how can she apply them to her home and its improvement? It is only through such a scientific study that she can make the ideal home of the future—the home which will surely be the solace of the nation.

The following scheme may be suggestive of some of the possibilities for a college course for women. This outline gives only the domestic-art phases of a possible course in household arts.

DOMESTIC ART AS PART OF A COURSE IN HOUSEHOLD ARTS, IN COLLEGES FOR WOMEN

Household Arts { Domestic science { Food / Shelter / Clothing } Home management. / Domestic art }

The courses following in domestic art are numbered I and II, and could be given in the 1st and 3d or 2d and 4th college years, leaving the alternate years for work in domestic science.

Course I.—Clothing and Design

Three Periods Weekly. One-hour Lecture. Two Hours Practical Work. Throughout the Year

I. Clothing—

(i) Economics of spending.

(1) Woman as spender.

(2) Cost of clothing.

(*a*) Materials. Affected by adulterations, bargain sales, seconds, out of season and style, sweatshop labor, quality, economy in selection.

(*b*) Making. (1) Dressmaker, seamstress, time, wage. (2) Home-made by self—hand-work on gowns. (3) Time for various garments. (4) In harmony with means, occasion, and personality—style, comfort, beauty. (5) Color in relation to dress.

(*c*) Care and cleansing of clothes. Repairing. (Chemistry of cleansing and textiles—related course.)

(3) Relation of cost of clothing to income. Proportion for gowns, hats, coats, shoes, gloves, etc. Depending on life, position, climate, etc.

(ii) Hygiene in relation to clothing.

(1) Comparison of leading textile fibres.

(*a*) Chemically and microscopically.

(*b*) History, growth, manufacture, properties and qualities as affecting health.

(*c*) In respect to suitability of clothing dependent on climate, occupation, general health, etc.

(iii) Ethics of shopping.

(1) Consumers' League.

(2) Sweatshop labor.

(3) Co-operatives.

(4) Economy of time, energy, money, through system, and consideration of others.

(iv) History of clothing.

(1) Evolution of dress.

(*a*) Relation to growth, education, and environment of different periods.

II. Design. (Practical work, two periods weekly, first semester)—

(1) Principles of design and combination of colors.

(2) Block printing, stencilling for scarfs, cushions, book-covers, draperies, etc.

(3) Designs for simple hand-work on gowns.

(4) Drawing human figure. Proportions, draping, lines in relation to figure, effects on appearance, showing art in lines of dress, costume design.

III. Clothing. (Practical work two periods weekly, second semester)—

(1) Economy in ability to do.

(*a*) Making of shirtwaist and simple summer gowns such as would appeal to college girls.

Course II.—Shelter

(Two Periods per Week for One Year)

I. The House—

(i) The exterior. (History of architecture a related course.)

(1) Appearance, location, city, country, suburb.

(2) Rents. Proportion of rent to income, number of individuals, etc.

(*a*) Adaptation to needs, position, etc., of occupants.

(*b*) False standards.

(3) Municipal art. Municipal League. Woman in relation to civic affairs. (Social economics a related course.)

(ii) The interior.

(1) The home.

(*a*) Meaning, atmosphere, affected by social changes; efficiency, happiness dependent on.

(*b*) The family, the home-maker, false standards; desire for luxury.

(2) The decoration and furnishing.

(*a*) Economy. (1) Respect to beauty, comfort, and health; position and needs of occupants. (2) Making most of existing circumstances. Dealing with and planning for specific problems. (3) Least expenditure of time, energy, money.

(*b*) Specific rooms. (1) Bedrooms, living-rooms, dining-room, etc. Ceilings, walls, floors, arrangement. (2) Decoration and furnishing. Floor coverings, walls, draperies, lighting, furniture, glass, pottery, tapestries, coloring, materials, quality, amount, cost.

(3) Proportioning of household expenditures. Repairs. New furnishing.

II. History of Periods of Decoration—

(1) Handicraft movement. Ruskin and Morris in relation to household art.

(2) History of tapestries and other textiles.

(3) History of silver, glass, etc.

III. Excursions—

Stores, factories, museums, study of furniture, stained glass, tapestry, etc.

References for Study

"Report of Lake Placid Conference on Home Economics," 1907.

CHAPTER XIII

DOMESTIC ART IN OTHER HIGHER INSTITUTIONS OF LEARNING

Domestic art may or may not be a phase of a girl's general training in college, but it now forms a decided part of the work open to women in other higher institutions of learning.

It is offered in many of the state and agricultural colleges as work of educational value open to women in the general course and counts for credit toward graduation. This is often designated as a home-maker's course and presents work in the various phases of domestic art as previously outlined. The work is often required as part of the general course, with opportunity for electives if there is particular interest in this specialty. In other instances this work is entirely elective. The courses offered are generally of a practical nature—garment and dress making, millinery and embroidery, designing and work in textiles. As yet little attention has been paid to the economic and ethical phases of the

work, although the artistic and scientific sides have received some attention. These should be of particular interest in higher education and make woman a wiser administrator of the funds which it will be her duty to disburse as she carries on the business of home-making. The courses offered in the State and agricultural colleges should aim to give this direction to the work. It is fatal to the cause for students graduating from this general course in the State college to go into this teaching field without additional preparation. Many of these State colleges have normal departments where additional training may be had in the more strictly educational phases of the work. Examples of the State and agricultural colleges giving work in domestic art are Ohio State University; University of Illinois; Ames Agricultural College, Ames, Ia; Michigan State Agricultural College; University of Tennessee.

Home-maker's courses are offered in many of the higher institutions besides the State and agricultural college. They are open, as a rule, to girls with and without previous high school training, and may be of an elementary or advanced nature. The work offered covers practical courses in household man-

agement, care of children, home nursing, elementary and advanced cookery for household use, garment-making, dressmaking, millinery, costume design, house sanitation, housewifery, and others. These studies group themselves about the shelter, nutrition, and clothing of the family, and reach a large class of girls who will probably marry early and do not care for the more academic studies, but are interested in the practical things of life. Such courses cannot fail to produce better and more intelligent homekeepers. Domestic art offers such students courses in dressmaking, garment-making, millinery, and embroidery. Courses in costume designing, color harmony, elementary design, and house decoration, study in the fabrics for use both for clothing and furnishings, and distinctive study in the wise purchase of articles of clothing and furnishings. The hygiene, cost, durability, repair, and selection of materials are all closely allied in this economic study. Examples of this type of course may be found at the School of Household Arts, Teachers College, Columbia University; Pratt Institute, Brooklyn; Stout Training School for Homemakers, Menominee, Wis.; Drexel Institute, Philadelphia; University of Chicago, and others.

Normal domestic-art training is offered in many of our universities, colleges, and technical institutions. In most of these the course is open to high school graduates, although some require two years of work in advance of the high school training. This, as a rule, insures a better grade of teacher and the course proves of greater value than when taken without additional training or experience. It is very wise for young students expecting ultimately to specialize in domestic-art teaching to have some experience in general teaching before undertaking the specialty. As a rule they make much better teachers when they possess some knowledge of general class-room management. A normal course in domestic art should offer instruction in the following subjects which cannot possibly receive just treatment in less than two years of intensive study. A three years' course is advisable.

(1) History and principles of education.

(2) General and educational psychology.

(3) Theory of teaching domestic art, with opportunity for practical work in its *various* phases.

(4) Supervision and organization of work in various types of schools.

(5) The study of textiles, their manufacture, economic purchase, durability, properties, and use.

(6) Garment-making, to include the application of all the hand-sewing stitches.

(7) Dressmaking, both elementary and advanced, with facilities for practice.

(8) Millinery.

(9) Miscellaneous hand-work, such as crocheting, knitting, and weaving.

(10) Elementary design and color harmony. Advanced work in design and color, with direct application to costume and home furnishings.

(11) The home as a sociological study. Its spirit, plans for its artistic study, both on the exterior and interior.

(12) Economics of the home in relation to home management, expenditures, purchase and repair of household clothing and furnishings.

Such training prepares for the teaching of sewing in elementary or high schools and supervisory work in schools or higher institutions. Not all teachers, however, who pursue such a course are fitted to do supervisory work. Much will depend on the previous training and experience. The demand in the teaching field of higher education is at present for women who have college degrees as well as diplomas for teaching the specialty. Such women must possess strong personalities and have the power of

initiative. The demand for this type of woman cannot be met and the field is open to those who will prepare themselves adequately for it.

With the development of trade school work in this country will probably come a demand for teachers and directors for such schools. In addition to the above outlined course, *directors* of trade schools should be students of general economics and sociology, as well as of the industrial conditions of women and children. They should be college women of the highest training with the spirit of investigation and a willingness to probe the difficulties in this particular field. So many of the trades open to women group themselves about the needle that it is preferable that the director be a woman who knows well the domestic-art field of work, although the future will see other lines of trade for women introduced in this type of school. The *teachers* in trade schools should be women with specific intensive knowledge of the kind of work to be taught. The general course in domestic art as outlined, with perhaps some omissions of the psychology and history of education, will make a good foundation for future intensive practical work in trade, of some phase of domestic art, or may sup-

plement the practical work of years of experience in trade. Normal training courses are given in Teachers College, Columbia University; Drexel Institute, Philadelphia; Mechanics' Institute, Rochester; Stout Training School, Menominee, and other institutions.

Household arts work in higher institutions is beginning to offer opportunity to students to prepare themselves for non-teaching positions. Courses are open to those who wish to prepare for institutional and household administration, dietetics, management of laundries, social work, nursing, costume design, house decoration, and other specific fields. Domestic-art work enters as a phase of the preparation of institutional and household administrators on the specific side of design, clothing, and textiles, their economic purchase, care, use, properties, etc. This phase of domestic-art work enters also into the training of social workers, house decorators, and costume designers.

Examples of institutions offering such training are: Household Arts School, Columbia University; Simmons College, Boston; Pratt Institute, Brooklyn, and others.

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(6) "Practical Millinery." J. Ortner. (Whitaker, London, 1897.)
(7) "Columbia Book of the Use of Yarns." Wm. H. Horstman Company, Philadelphia.)
(8) "Woman's Library of Needlework." Ethel McKenna, 1903.
(9) "Lace." Goldenberg. (Brentano, 1904.)

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(1) "Philosophy of Color." Clifford, 1904.
(2) "Color, Dress, and Needlework." Lucy Crane. (Macmillan.)
(3) "Suggestions for Instruction in Color." (Prang, 1893.)
(4) "Art in Needlework." L. F. Day. (Scribner, 1900.)
(5) "Household Art." Mrs. Candace Wheeler. (Harper, 1893.)
(6) "Some Principles of Every-Day Art." L. F. Day. (Scribner, 1900.)

(7) "Household Art." Mrs. Candace Wheeler. (Harper, 1893.)
(8) "Plea for Handicraft." Crane. (The Philistine Magazine, March, 1900.)
(9) "Colonial Furniture in America." Lockwood. (Scribner, 1901.)
(10) "History of English Furniture." Percy Macquoid. (Putnam, 1904–6.)
(11) "History of Architecture." Hamlin. (Longmans, 1895.)
(12) "Houses in City and Country." H. Stone, 1903.
(13) "The Art of Right Living." Ellen H. Richards.

DRESS

(1) "Costumes of Colonial Times." Earle. (Scribner, 1894.)
(2) "Two Centuries of Dress in America." Earle. (Macmillan, 1903.)
(3) "What Dress Makes Us." Quigley. (Dutton, 1897.)
(4) "English Costume." Callthorp. (A. and C. Black, London, 1906.)
(5) "The Human Body." Martin. (Holt, 1900.)

ECONOMIC AND SOCIOLOGICAL STUDIES

(1) "Principles of Economics." Fetter. (Century, 1904.)
(2) "The Woman Who Spends." Richardson. (Whitcomb, 1904.)
(3) "How to Keep Household Accounts." Haskins. (Harper, 1903.)
(4) "Home Economics." M. Parloa. (Century, 1898.)
(5) "Encyclopedia of Household Economy." E. Holt. (McClure, Philadelphia.)

(6) "Economic Function of Women." Edward Devine. (Published by American Academy of Political and Social Science, No. 133, Philadelphia.)
(7) "Social Control." Ross. (Macmillan, 1901.)
(8) "Democracy and Social Ethics." Jane Addams. (Macmillan, 1902.)
(9) "The Level of Social Motion." Lowe. (Macmillan, 1902.)
(10) "New Basis of Civilization." Patten. (Macmillan, 1907.)
(11) "Cost of Living." Ellen H. Richards.
(12) "Home Problems from a New Standpoint." Caroline L. Hunt.
(13) "Vocations for the Trained Woman." (Women's Educational and Industrial Union, of Boston, 1910.)

STUDY OF TEXTILES

(1) "The Story of the Cotton Plant." F. Wilkinson. (Appleton, 1899.)
(2) "Cotton Spinning." F. Marsden. (Macmillan, 1895.)
(3) "Woolen Spinning." Charles Vickerman. (Macmillan, 1894.)
(4) "Textile Fibres." Matthews. (Wiley, 1904.)
(5) "The Dyeing of Textile Fabrics." Hummel. (Cassell, 1893.)
(6) "Textiles and Clothing." Kate H. Watson. (American School of Home Economics, Chicago.)
(7) "Woolen and Worsteds." McLaren. (Cassell, 1899.)
(8) "Linen—How It Grows." (National Flax Fibre Company, 1900.)
(9) "Linen Trade—Ancient and Modern." Warden. (Longmans, 1867.)

(10) "Silk Culture in California." Carrie Williams. (Whitaker, 1902.)
(11) "Weaving and Designing." Ashenhurst. (Simpkins, London, 1879.)

The following magazines give helpful suggestions for those interested in domestic art:

"The School Arts Book." $1.50 per year. (Davis Press, Worcester, Mass.)
"The Manual Training Magazine." $1.50 per year. (Manual Arts Press, Peoria, Ill.)
"The Ladies' Home Journal." $1.50 per year. (Curtis Publishing Company, Philadelphia.)
"The Good Housekeeping Magazine." $1.50 per year. (Phelps Publishing Company, Springfield, Mass.)
"The Woman's Home Companion." $1.25 per year. (Crowell Publishing Company, New York.)
"The Delineator." $1.00 per year. (Butterick Publishing Company, New York.)
"Harper's Bazar." $1.25 per year. (Harper & Bros., New York.)
"L'Art de la Mode." $3.50 per year. (Morse, Broughton Co., New York.)
"Elementary School Teacher." $1.50 per year. (University of Chicago Press, Chicago.)
"Teachers College Record." $1.00 per year. (Teachers College, Columbia University, New York.)
"Educational Review." $3.00 per year. (Educational Review Company, Columbia University, New York.)
"The Survey," formerly "Charities and the Commons." $2.00 per year. (Charity Organization Society.)
"The Craftsman." $3.00 per year. (Gustav Stickley, 41 West Thirty-fourth Street, New York.)