

AN ABSTRACT OF THE THESIS OF

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Title: A RESOURCE GUIDE FOR A LATE JUNIOR OR EARLY SENIOR
HIGH SCHOOL UNIT ON FAMILY RESPONSIBILITIES INTEGRAT-
ING INDUSTRIAL ARTS AND HOMEMAKING

Abstract Approved: Redacted for Privacy
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The major purpose of the study was to develop a resource guide for use at the late junior or early senior high school level to be used with boys and girls, integrating the subjects of homemaking and industrial arts. To plan this guide, the writer:

1. Surveyed the industrial arts and homemaking teachers in Oregon to discover what contemporary courses were being taught.
2. Identified concepts in industrial arts and homemaking which could be used in a late junior or early senior high school coeducational class.
3. Constructed a resource guide for the homemaking aspect with concepts, generalizations, objectives, suggested learnings, teaching aids, and outside resources.
4. Utilized several industrial arts and homemaking teachers in Oregon to evaluate the guide and make comments

for improvement of the guide.

5. Revised the resource guide using teachers comments and all other available resources.

To discover what contemporary classes were being taught throughout the state of Oregon, a post card questionnaire was sent out to 222 schools. Of the 126 questionnaires returned, 88 schools reported they had contemporary courses at the eighth, ninth or tenth grade levels. The length of each contemporary course varied from school to school. It appeared that boys homemaking and coeducational industrial arts were the two contemporary programs taught the most frequently and were primarily term or semester courses. Coordinated industrial arts and homemaking were nonexistent except for one school where it was taught as a term or semester course. This indicated that although there was an interest in contemporary programs, there was not too much being done in the area of coordinated industrial arts and homemaking.

Fifty-eight replies to the questionnaire indicated that the industrial arts and homemaking teachers would be willing to be resource and/or consultants for the study. When the resource guide was ready for evaluation, 35 of these people were asked to read the guide and respond to questions on an evaluation form. The responses appeared favorable from the 17 industrial arts and homemaking teachers who returned the evaluations. In general, they felt it could be a useful tool to their teaching and was adaptable to many situations.

The resource guide was organized into seven units; each a part of the overall scope of the course. Each unit was organized into four subdivisions: topics, objectives, learning activities and resources. The resource guide was designed to be flexible enough so that the length of the course could be a semester or a full year depending on the structure of the school. The resource guide was also designed to encourage the homemaking teacher and the industrial arts teacher to work together in presenting the material.

The writer would recommend further study in the area of an integrated industrial arts and homemaking class. There is need for the continued evaluation of the offerings within such a course to insure the immediate and the future needs of students. With the world ongoing and changing, such a course should be in a continual state of change and updating. Through continued study a dynamic curriculum could emerge which would attract boys and girls because it would be based on all areas of personal and family living.

A RESOURCE GUIDE FOR A LATE JUNIOR OR EARLY SENIOR
HIGH SCHOOL UNIT ON FAMILY RESPONSIBILITIES
INTEGRATING INDUSTRIAL ARTS AND HOME MAKING

by

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A RESOURCE GUIDE FOR A LATE JUNIOR OR EARLY SENIOR HIGH
SCHOOL UNIT ON FAMILY RESPONSIBILITIES INTEGRATING
INDUSTRIAL ARTS AND HOME MAKING

I. INTRODUCTION

The picture of the public school educational program is changing. As the world is progressing in many different directions, we find Americans who have become "accustomed to regarding school as a place where the young have the opportunity to become literate, have begun to realize that education is a serious business for society, not just a freely extended privilege" (Hass, 1970, p. XV). With this new realization we find many changes occurring in our school systems. The ideas and philosophies of teaching and learning have changed and are continuing to change. The current key word in education is "innovation." Webster defines innovation as: "a new method, custom, device, etc." There is concern with the learning process and with the value of what is being learned. There are new methods or techniques being developed on the premise that the new ideas are better equipping students to cope with the changing world. School districts are trying different procedures and using different facilities. Many innovative programs are being used in the schools. Some programs involve the total school curriculum, while others are restricted to a specific subject matter or grade level. There is a good opportunity to design and implement programs to serve the special needs of early adolescent boys and girls.

Many of these needs have been brought about by our changing society.

Need for the Study

The roles of men and women and of boys and girls are changing. Smith (1966-67), in an article devoted to the male role, points out that until comparatively recent times, the roles of male and female were clear cut and divided more or less according to sex. This is not true now. The claim can no longer be made that woman's place is in the home and man's place is in the world of work. Women are entering the labor market in greater numbers every year. In many homes the men and boys are sharing the duties within the home. Smith says that the family roles played by men today are indefinite and vacillating. It seems that it is essential that boys and girls be better educated for their present and future homemaking roles.

There is indication from the changing roles of public education and of male and female roles, that a need exists to prepare adolescents for their present and future lives. Clark (1970), in discussing his development of a "Material Arts" course in East York, says that many techniques are taught in isolation. When a series of techniques are united, an expression of creativity suited to an individual's needs and interests, is brought about. School work and preparation for the future become more meaningful when several related

areas of study are brought together. "Exploiting our human resources and facilities to the fullest we can contribute in some way toward a solution to the problems our students are facing today and will face tomorrow" (Clark, 1970, p. 25).

Nelson in the second edition of the Review and Synthesis of Research on Home Economics Education, concluded that implications for curriculum emerge from studies reviewed, and suggests a need for expanded vocational education to serve a larger portion of the adolescent population. The studies indicate a need for more attention to affective goals in education (Nelson, 1970). The majority of young people will be co-partners in establishing a home and rearing a family. These individuals need adequate preparation for achieving success in this most important part of their lives. It appears that a combined course of industrial arts and homemaking could meet the needs of early adolescents and could offer them some help in solving their problems of today and tomorrow. In creating an integrated course, concern needs to be directed to establishing relevant objectives for boys and girls, but more precisely, concern needs to be directed toward providing an adequate resource guide for those teachers who might be teaching such a course. In reviewing the recent literature on industrial arts and homemaking, taught coeducationally, a need is identified for teacher preparation in the areas of understanding and teaching students of the sex opposite to the one they usually teach.

The decision to construct a resource guide for integrating industrial arts and homemaking is based on the need for improved family life in the present and the future, and the need to bring boys and girls together in the classroom for better interaction. It was also felt that there was a need for an integrated teaching source which would include curriculum suggestions for instructors with limited time and resources.

Statement of the Problem

The central problem of the study is the research, development, and construction of a resource guide for use at the late junior high or early senior high school level. This is to be used with boys and girls, integrating the subjects of industrial arts and homemaking. The proposed problem involves three major dimensions:

1. Identification of those concepts in industrial arts and homemaking which could be used in a late junior high or early senior high school coeducational class.
2. Construction of a resource guide for the homemaking aspect with concepts, generalizations, objectives, suggested learnings, teaching aids, and outside resources at the late junior high or early senior high school level.
3. Modification of the guide through evaluations by several teachers regarding the usefulness of such a resource guide.

Definition of Terms

Definitions of terms used in this study are as follows:

Coeducation - is the teaching of both boys and girls together.

Concept - "refers to an abstraction representing the world of objects and events and is a means of organizing them into categories. Concepts have many dimensions and meanings. They are themes which recur throughout the curriculum in a cumulative and often overlapping way" (American Home Economics Association, 1967, p. 23).

Contemporary - refers to "living or occurring in the same period" (Webster, 1955).

Generalization - to express "an underlying truth, have an element of universality, and usually indicate relationships. Generalizations help to give meaning to concepts" (American Home Economics Association, 1967, p. 23-24).

Home Economics - "the study of the human and material forces affecting home and families and the utilization of this knowledge for the benefit of man kind" (Byrd, June, 1970).

Homemaking - (as used in referring to public school programs). Refers to preparing students for the establishment and maintenance of a home.

Industrial Arts - "is a study of tools and machines, materials, processes, and the products of industry. It's purpose is to help students develop interests and aptitudes that are related to industrial fields. It's outcomes may be of benefit in chosen professions, businesses, or trades, in avocational activities, or in solving consumer problems" (State Department of Education, 1967, p. iii).

Integrated program - a program of identified concepts and

experiences which have a relationship from two or more instructional areas. This study is concerned with the integration of industrial arts and homemaking as one.

Learning experience - "a purposeful activity that has meaning to students at their developmental level, carried through to completion and evaluation" (Goode, 1959, p. 214).

Objective - a statement which is measurable and specific. It is the sub-part of a goal and shows what is to be accomplished and the possible results.

Resource guide - "a comprehensive collection of suggested learning and teaching activities, procedures, materials, and references organized around a unifying topic or learner problem designed to be helpful to teachers in developing their own teaching units appropriate to their respective classes" (Goode, 1959, p. 466).

Limitations

This study will be limited in scope to the extent that it will emphasize the interests and abilities of late junior or early senior high school boys and girls. It will further be limited in that it will only suggest areas of industrial arts which could be integrated with home economics due to the limited background of the author in industrial arts.

II. REVIEW OF LITERATURE

The American Adolescent

American society is placing more emphasis on the adolescent today than ever before in its history. Basically the adolescent is going through the transition from child to adult, he is no longer a child but he is not allowed to take on the privileges and the responsibilities of the adult (Fleck, 1968). It is a difficult and demanding experience. He is growing up in a period of rapid technological change, political unrest and social uncertainty. Much attention is focused on the restlessness and the protesting of the American adolescent. Fleck (1968) points out that it must be recognized that adolescents, as all humans, have basic needs. In Maslow's hierarchy of needs, they are identified as: safety, belongingness and love, esteem, and self-actualization. In addition adolescents have other needs that are characteristic of their particular age group. They have a desire to be free from family domination while at the same time they need the security of being able to fall back on adult guidance. They need to belong; to have achievement, recognition and economic security; to be free of fear; to receive love and affection; and to be free of intense feelings of guilt. They need to have self respect and understanding of the world in which one lives (Fleck, 1968).

The adolescent is more affluent today than ever before.

They spend so much money each year, that businesses are directing sales promotions to the adolescent. The teenage pattern of life is changing: a greater number of years are being spent becoming educated, there is more involvement in society and with politics. The adolescent has his own ideas about clothing, language and drugs. With many of these new experiences, a wide variety of adolescent personalities have been created (Teenage Fads: ... 1968). Herlock (1966), in an article titled "American Adolescents of Today -- A New Species," says that today's adolescent is involved with peer conformity, preoccupation of status symbols, irresponsibility, anti-work, anti-intellec-tualism, new values, disrespect for the older generation, criticism and reform, disregard for rules and laws, and unrealistic levels of aspiration. Some of the developmental tasks that the adolescent is working toward are: achieving new and more meaningful relationships with age mates of both sexes, achieving a masculine or feminine social role, using the body effectively, achieving assurance of economic independence, selecting and preparing for an occupation, preparing for marriage and family life, developing intellectual skills and concepts necessary for civic competence, desiring and achieving socially responsible behavior, and acquiring a set of values and an ethical system as a guide to behavior (Havinghurst, 1953).

Education

With the many changes occurring in society today, a long

hard look should be taken at the way in which adolescents are being educated. Adolescents are no longer content with the traditional ways and means of education; today they are more realistic and are questioning the processes they are going through. Today it is not enough to train boys in vocations and girls in the home; thought needs to be given to training boys and girls together in the subject of life.

Industrial Arts Education. The field of industrial arts education has been in a constant state of flux and reorientation since its early inception in the secondary schools. In the ten years following 1883, when activities of an industrial education type first began to appear in the public schools of the United States, there was a rapid growth in the number of programs being implemented. Much of this was due to the early demands and interests of labor unions (Cochran, 1970). One of the schools that became quite influential during this era was "The Laboratory School" operated by John Dewey at the University of Chicago. Recognizing the need for practicing behavior to be learned, Dewey cast aside the faulty assumptions of mental discipline. He envisioned new functions to be served by work with tools and materials, and incorporated these factors into an educational program (Cochran, 1970, p. 3-4).

A catalyst for the early consideration of industrial-oriented classes in the public schools was an editorial by Charles R. Richards in the October, 1904, issue of "Manual

Training Magazine." In presenting the case for changing the name to "industrial arts," he cited psychological support for making the change. Although this suggestion was premature, it did provide a basis for later shifts in emphasis from manual training to manual arts to industrial arts (Cochran, 1970). A second motivational force during the first decade of the twentieth century was provided by those advocating a greater emphasis on the vocational aspects of manual training. Impetus for this movement came in 1905 from the Commission of Industrial and Technical Education which became known as the Douglas Commission. The end result was an attempt to enrich the public schools with greater industrial orientation and to expand the program along vocational lines through independent industrial schools (Cochran, 1970). A third prominent influence in the first decade of the twentieth century was the organization of the National Society for the Promotion of Industrial Education in 1906. The Society gained national recognition and was instrumental in securing the active support of hundreds of local, state, and national organizations; it stimulated state aid incentive programs and played a key role in promoting and developing much of the vocational legislation that was enacted (Cochran, 1970).

By 1908, such leaders as James E. Russel and Frederick G. Bonser saw industrial arts extending throughout the school program to provide more realistic experiences. As early as 1909, Russel advocated a course in industrial arts dealing

with stages of production, distribution, and consumption of such raw materials as foods, metals, textiles, and woods. Federal aid for various educational purposes has been in existence since the passage of the Northwest Ordinance of 1785. It was not until 1907, however, that an organized federal aid movement for industrial education, of less than college level, was underway. In 1914 the Commission of National Aid to Vocational Education was announced. Later in the year, the Commission recommended federal aid for the training of vocational teachers, paying part of their salaries, as well as support for studies and investigations concerned with vocational education. This, then, set the stage for the passage in 1917 of the Smith-Hughes Act and the other federal vocational legislation that has followed (Cochran, 1970).

There was a great expansion of industrial education programs in the years following the passage of the Smith-Hughes Act and the end of World War I. By 1922, shop work made such significant inroads into the secondary schools that it was justified on its own basis. By the end of the decade, manual arts or industrial arts was generally accepted in the school programs; and there was, in fact, a tendency to make such offering required in junior high schools.

As evidenced in the literature, industrial education had continuously adjusted to the socio-economic conditions of the educational environment. Industrial education had met the needs and challenges of the day. Currently, it seems, that

educators are ready for reappraisal and refocusing of the objectives, the content, and the direction for industrial education (Cochran, 1970, p. 12).

Most traditional industrial arts programs of today consist of five areas: metals, woods, crafts, graphic arts and power mechanics. In the past few years there has been an emphasis towards an area called "materials and processes" which includes and interrelates the traditional areas. This area encompasses processes conducted with all materials.

Possibly one of the best definitions of industrial arts education is:

Industrial arts is one of the practical arts; it is a form of non-vocational education which has for its purpose the giving of information about, and experience in, the use of tools, materials, and processes incident generally to the home and to the manufacturing industry.

Groneman, 1954, p. 1

Home Economics Education. Francis Bacon was the "first thinker in history to make explicit the thought that nature is the foundation of knowledge, and furthermore that knowledge should be applied to the improvement of man's estate" (Budewig, 1957, p. 229). He felt that theory and practice should proceed together and so began the roots of home economics. However, Bacon was far ahead of his times and withheld his writings on the subject until a few years before his death. In the latter part of the eighteenth century, some 150 years after Bacon's writings, Count Rumford (or Benjamin Thompson), published his feelings and findings in a series of essays. Rum-

ford used the term "domestic economy" and felt "the application of science to the affairs of the household with a fine degree of economy for the purpose of making the whole of life happier and more effective - physically, intellectually, and emotionally - was in the end an art" (Budewig, 1957, p. 301).

After Rumford, the idea of "domestic economy" was not long in catching on. Catharine Beecher was one of the first writers to call attention to the need for a study of home economics in the schools. Her Treatise on Domestic Economy, published in 1841, was widely read. Many others published works all with the same basic premise: "theory and practice must go hand-in-hand if education was to be productive of the highest good" (Budewig, 1957, p. 303).

Home economics is more than an aggregate of courses, more than a vocational or technical subject. It is more also than a social discipline. Its subject matter and aim are as large as life itself for it is committed to education for that most important segment of living, the life that takes place in homes (Budewig, 1957).

Home economics developed as a self-contained entity and not as a mere outgrowth of agricultural education, manual training, the new education expounded by John Dewey, the woman's movement, or a narrow, materialistic philosophy concerned only with the housekeeping skills.

Most contemporary homemaking programs of today consist of six areas: foods and nutrition, clothing and textiles, child

development, housing and home furnishings, management and family economics, and family relationships. Within the past few years there has been a greater emphasis put on child development and family life and currently the trend of home economics is an increasing emphasis on consumer economics and wage earning aspects.

Possibly one of the best definitions of home economics education is:

Home economics is unique in that it draws upon all the other courses in a high school curriculum and applies them to the family. It is an art, as it involves skills that are based on certain traditions and qualities that are intangible and undefinable, such as beauty, taste, and values. It is also a science because it involves the application of knowledge and truths that have been arrived at through scientific process. Home economics does not try to teach philosophy, math, physics, art, music, religion, or chemistry, but it attempts to integrate all of them and apply them in the daily processes of making a home.

Hall and Paolucci, 1970, p. 159

Integrating Industrial Arts and Home Economics

In view of the changes occurring in society it is wise to take a look at the adolescent and how his needs can best be met today while at the same time prepare him for a changing society. It appears that as a man and woman make a home together, or by themselves, it could be beneficial for each of them to know something about the traditional roles and expectations of the other. Dr. Luther G. Baker, chairman of the department of home economics, Central Washington State

College, points out that thinking of home economics as woman's work "seems intriguingly incongruent with the stated purpose of home economics; that of preparing people for the several aspects of home and family life" (Men are Important Too, 1971).

He states further:

I submit that so long as home economics remains predominately an arena for female action and opinion, it has no right to presume to speak for the family and cannot develop and implement those programs needed to strengthen and improve family life.....men must be brought into the effort both as teachers and as learners. Many couples who are adequately fulfilling former functional roles (as husbands and wives) are, nevertheless, frustrated in their marriage simply because they do not possess the skills for living together in the intense interaction of marriage - a lack, incidently, most frequently found in men.....it is together that families are bisexual and that homemaking is a joint husband and wife venture.

Men are Important Too, 1971, p. 8

Such statements as "today's young man is no longer satisfied with the traditional roles in the family - that of being the bread winner. He needs and wants to be knowledgeable in the various areas of consumer and homemaking education" (Adams, Oct. 1971, p. F-47), point out the need to integrate the teachings of industrial arts and homemaking. By doing so, a foundation for life and family living is created.

There are many implications in the industrial arts courses for girls. According to Broddhead Garret Company (N. D.): "Your industrial program should include teaching the student how to take care of his house and appliances in the home. Today's houses with all their mechanical and electrical fur-

nishings represent the largest single expenditure many of us make during a lifetime." Broddhead Garrett Company has suggested a course and a challenge for industrial arts classes with its development of a Practical Mechanics Course. The activities in this course are based on the types of repair, maintenance, and improvement needs commonly found around the home. However, while they are all basically activities done in a traditional industrial arts course, in this proposal they are home and family living oriented. An article in School Shop (1969), pictures an industrial arts teacher showing a girl how to run a lathe, the accompanying article discusses the updating of ideas and things in the industrial arts program. It implies some challenges such as:

- . working with wood not only means building things, but caring, repairing or refinishing furniture, cabinets, or structures.
- . working with metal involves the knowledge of various types of metals and could be useful knowledge from the standpoint of cooking utensils.
- . working with electronics is an important area to know with the modern appliances available for the home.
- . working with auto mechanics should include girls as well as boys because of today's very mobile society and dependence on the automobile.
- . working with polymere materials which are nothing more than plastics is important because so many home pro-

ducts are being made of plastic today.

There are many implications in homemaking for boys. The Journal Of Home Economics, (May, 1970), points out in an article, that men head the list of persons dying with conditions such as heart disease. "Nutrition and in an indirect sense, family life, have much to do with this" (p. 338). The implication for education at the end of the article states that if the husband does set the eating pattern and is the target of heart disease, then each boy should come in to contact with better nutrition education. In preparing students for their future, it is important to consider more than just the necessities of living. The Illinois Teacher, (January-February, 1971), points out that home economics should be more people oriented and less thing oriented, and that more people should be served in more ways, particularly the male. Areas taught in homemaking should include such topics as: interpersonal relations in our multi-racial-internationally-heavily-populated world; habits and attitudes that add up to employability; decision making skills to maximize family resources; skills for creative outlets; skills for managing the everyday necessities of living; skills for time away from the job; and skills for earning a living (Illinois Teacher, January-February, 1971).

Characteristics of Male and Female

Biological forces in and of themselves are decisive factors in the shaping of certain male and female personalities.

The profound effect of the sex glands and their hormone secretions on the male personality contributes to such traits as aggressiveness and courage. There is also a biological basis for man's urge to pursue. However, culture plays a major part in thwarting or encouraging these tendencies. Biological differences do not by themselves determine behavior (Behavior Patterns.....N. D.).

The female is less muscular than the male and falls short of brute strength. But she is more durable and has greater resistance to fatigue. She can stand more suffering and go longer without sleep. The death rate of the male exceeds the female. Women have minor illnesses more often than men. They have a much more complicated glandular makeup to reason with than do men (Behavior Patterns.....N. D.).

Women are physically awkward by mans standards, however when industrial jobs require nimble fingers, employers have learned that many women have physical skills unequaled by many men.

Man tends to work by spurts of great effort. Women tend to work at a more constant pace. Women have greater capacity for monotonous, repetitious work and bear up under it with less psychological expense. Men are more pugnacious than women: they not only are prone to fight, but are more prone to enjoy fighting. Women tend to be more subtle, more indirect in their methods and in achieving their objectives. There is a tendency for men to be interested in facts as such or

facts and their general impersonal significance. While women tend to be more interested in relationships, especially in the personal aspects of those relationships. It is often said that a woman reads a personal relationship into a personal statement: when a woman forgets her husband's birthday, from his point of view she has simply forgotten his birthday; when a man forgets his wife's birthday, from her point of view, he has forgotten her. Man is more compulsive in regards to sex and sexual interest. Women's interest is less compulsive and more likely to have inhibitions. Women are much more romantic in temperament and outlook than are men. Men more readily separate sex and love, while women are more likely to combine them. Women from early adolescence through adulthood are concerned with their bodies and personal appearance - men are more concerned with affairs and activities external to themselves than with their own bodies and feelings. Women are freer to express such emotions as fear, pity, sadness and affection for a person of the same sex. Men are so overlaid with traditions and restrictions and inhibitions that not only does he not express feelings freely, he often comes to experience them to a lesser degree (Behavior Patterns.....N. D.).

Women respond favorably to pursuit by men while men usually respond unfavorably to pursuit by women. When a woman marries, her home, children and husband become the most important things in life to her. A man's marriage is important to him, but is not his all absorbing concern. What comes first is his

career, his work, his goals, and his development of his talent. Women talk mostly about personal things, men more often about activities - politics, business, sexual exploits, sports, and their accomplishments. A male in meeting others, tries to influence others by his conversation and behavior. The female is more often interested in making an impression on others by her appearance (Behavior Patterns.....N. D.).

Characteristics of Students

In dealing with students in the classroom a basic understanding of their needs and characteristics is necessary. Almost all boys and girls grow rapidly in junior high school - they may grow as much as six inches within a period of one year. Boys become broad shouldered and deep chested while girls develop breasts and hips. In both sexes there is uneven growth in various parts of the body. Secondary sex characteristics began to show up at this age. This is an awkward age and students need to understand why they are like this. There are voice changes, mainly in boys. There is a problem with acne. Reproductive organs mature. And with all of these changes occurring in both boys and girls, there needs to be an awareness that there is a sharply widening difference between the two sexes in motor skills. In considering teaching facilities thought needs to be given to providing a wide range of seating sizes and working areas (Otto, 1958).

During this period of acceleration in growth there is

a lowered resistance and students fatigue easily. Students need a schedule of work and leisure which allows for sufficient sleep and rest. The early adolescent is extremely restless no matter how keen his interest is. In providing course work, consideration needs to be given to providing short, active kinds of learning to maintain his interest and motivate him (Behavior Patterns.....N. D.)

The early adolescent is better able to deal with abstracts and symbols. He has a steadily increasing ability to reason, gain insight, judge, and generalize. He needs experiences which are challenging. Creative and research projects stimulate him (Behavior Patterns.....N. D.)

Boys like travel, television, sports, movies, radio, pets, collections, reading, school, writing, music, family, and painting. Girls like many of the similar things but sports are less important (Behavior Patterns.....N. D.) Students of this age have an exaggerated emotional response. Boys are angered by the failure of material objects to function properly. Girls are angered by social problems. Boys' response to anger is kicking or talking rather than violence or violent exercise. Girls' response is usually to cry (Otto, 1958).

At the junior high age of development, adolescents are beginning to find a meaning to life and security. They are becoming interested in ethics and morality and are aware of the inconsistency in the codes of conduct of adults. They begin to generalize from experiences and develop ideas of

controls of behavior and apply them. There is a serious awakening of religious feelings (Otto, 1958).

In dealing with students at the late junior high school or early senior high school age, a teacher must be aware first of all, of the individual characteristics and needs of the male and female, and secondly of the individual characteristics and needs of the adolescent. It can be seen that dealing with boys and girls in the classroom takes considerable understanding and patience.

Needs Felt by the Late Junior High or Early Senior High School Student

In a study done by Eyler (1969), it was determined that the 14 and 15 year olds participating, eagerly accepted the study and felt it was a good opportunity for them to write about matters of importance to them. In doing the study, it was found that even as engrossed as they are in their own problems of pubescent development and of peer and parent relationships, this young society is groping for a mature responsibility.

Generally the groups of adolescents at the 14 and 15 year age group were interested in: knowing more about life, how to get along with the other sex, how to plan efficiently for health and daily habits, what products are irritating to the body, terms doctors use, what mental and physical changes the body goes through, how to develop minds to the fullest extent, and what makes nerves so sensitive (Eyler, 1969).

The major concerns of this age group are with the problems of the entire society: alcohol, drugs, cigarettes and pollution. There is also a high pitch of concern with peer relations, parent relations and sex education. In providing meaningful course work for students it is important to keep in mind what their interests are (Eyler, 1969).

Related Research

In reviewing the recent research done in industrial arts in curriculum development, there seems to be many diverse views. To some, industrial arts is a motivating activity; to others, it is an occupational or pre-occupational subject; some view it as general education which serves all students while making provisions for different abilities; some derive its content from a broad interpretation of technology or American industry while others derive content from a delimited analysis of man's practices in industry in converting materials to products; some analyze processes and materials of specific industries to derive content and others analyze functions common to many industries (Streichler, August, 1966). It appears that industrial arts is adaptable to a variety of curriculum approaches and could blend well in an integrated approach of teaching home living. Unfortunately little has been written about girls in the industrial arts department.

Homemaking has been taught for many years to a great many people. In the 1930's the importance of education for

family living received added emphasis and home economics received recognition for its function in this education (Williamson, 1954). In 1941, two national organizations of educators stated:

If homemaking and family life and the rearing of children are to be viewed as opportunities for living and enjoyment of life, then homemaking education must contrive to present the tasks of home management and housekeeping and child care in terms that men can share, without embarrassment and reluctance, enjoying homemaking and the caring and rearing of children

Williamson, 1954, p. 26

From such statements of educators, it can be seen that homemaking programs can not be complete unless boys and men are included and can share some of the lessons and ideas which the girls and women are exposed to. From such statements and ideas, the problem arises as to how to include men and boys in the homemaking program.

Through the years several methods of teaching boys homemaking have evolved: 1) term, semester, or a full year of boy's homemaking, 2) term, semester, or a full year of coeducational homemaking, 3) exchange homemaking, 4) family life homemaking. In each case, the title of the course may vary in individual schools, but the content may remain basically the same (Force, 1962).

The needs, interests and characteristics of the group to be taught is of primary concern in planning an adequate program. Golden (1953) found that generally boys: 1) want to be accepted members of adult society, 2) want peer appro-

val more than parental approval, 3) feel pressure of group approval or disapproval, and 4) need to feel like a member of the group. From this, it would seem the success or failure of the homemaking program would depend greatly upon the overall acceptance by the students - i. e. the realization by the group of the changing roles in society (Force, 1962). Golden (1953), also found that it was the overall opinion of those questioned that boys needed a mixed sex social group to learn how to talk and act with girls.

Golden (1953), also found some of the subject matter needs of boys. In general 50% or more of the 13 to 18 year old high school boys questioned felt they needed: 1) to know how to accept responsibility, 2) to know what they had the ability to do, 3) to become the kind of guest or host people enjoy, 4) to understand how to solve their problems intelligently, 5) to be able to decide which are the most important objectives to be accomplished in the home, 6) to be able to use new methods and techniques, 7) to know how to improvise when the "latest things" are unavailable, 8) to be able to plan work so homemaking activities get done quickly and efficiently, 9) to understand how income affects their standards of living, 10) to understand how to live with their incomes, 11) to be able to keep accurate financial records, 12) to know how to deposit money and write checks, 13) to be able to make decisions about satisfactory ways of saving, 14) to know how the government and other organizations provide protection for the

investor and the consumer, 15) to know how to choose a place to live, 16) to know how to make their home attractive, 17) to be able to choose home furnishings, 18) to be able to buy household appliances and equipment, 19) to be able to take care of repairing and decorating, 20) to understand why courtships and marriages are wholesome and successful, 21) to understand normal sex relations in marriage, 22) to plan family functions and activities, 23) to understand why children behave as they do, 24) to know what is thought to be normal development for a child physically, mentally, socially and emotionally, 25) to use good judgement in guiding children's activities, 26) to be able to buy clothes for themselves intelligently, 27) to be able to plan, cook, and serve a simple nutritious meal, 28) to be able to buy food that is reasonable in price and suited to the needs of the family, 29) to know what children need to eat and to get them to eat it.

After considering the interests and needs of boys and girls in an integrated industrial arts and homemaking program thought needs to be given to motivating students to take such a course. A study by Miller entitled A Research Project to Develop Curriculum for a Family Living Course Attractive to High School Boys pointed out six ways to change the attitudes of the student body to a more favorable feeling about family living and homemaking courses. First, Miller (1968, pp. 42-44) recommended that "This course ought to be required of every boy and girl." Secondly, she thought she could "...make the

course so helpful and so interesting to the students that they will recommend it to their friends." Next, she suggested an administration move "...which could help overcome boys' reluctance to enroll in a family living course would be to change the name of the course." "Fourth, a man teacher might be added to the team of teachers handling the classes." Another "...way to attract more boys to the family living course has to do with the department in which it is offered," and a final suggestion "...is to open the course to all grade levels."

III. METHOD OF PROCEDURE

Seeking Assistance from Oregon Industrial Arts and Homemaking Teachers

There has been little research done in the area of an integrated course for boys and girls in which the content of industrial arts and homemaking are combined. We do have some background in coeducational home economics and have seen some girls enter into the courses provided by the industrial arts department. However, little has been done to combine these courses and develop something that relates to the home and family and the processes involved in maintaining a home and family.

A post card questionnaire was developed in order to discover what types of coeducational courses were being offered in the industrial arts and homemaking departments in the Oregon public schools (appendix A). Industrial arts and homemaking teachers were asked if classes were taught in their schools in 1) boys homemaking, 2) girls industrial arts, 3) coeducational homemaking, 4) coeducational industrial arts, 5) exchange homemaking and industrial arts, 6) coordinated homemaking and industrial arts, and 7) other possible innovative courses. The questionnaire also asked if teachers were willing to be consultants for the study. These post card questionnaires were sent to 222 schools in the state of Oregon identified in the directory "Homemaking Teachers in Oregon Public Schools 1971-72" (with the knowledge that the

school did have a homemaking department). One questionnaire was sent to each school outside of the Portland school district, having an eighth, ninth or tenth grade with the instruction that the card should be shared by the industrial arts and homemaking departments. Of the 222 questionnaires sent out, 106 were sent to high schools, 104 were sent to junior high schools, 7 were sent to middle schools, and 5 were sent to elementary schools.

Analysis of Questionnaire

At the end of eight weeks, 126 of the questionnaires had been returned. This represented 56 percent of the 222 schools that were sent questionnaires. Since the writer was interested in those schools teaching either industrial arts or homemaking coeducationally, she separated 88 cards indicating some type of coeducational industrial arts or homemaking from the total 126 cards received. These returns were analyzed to discover:

1. number and percentage of questionnaires which came from senior high schools, junior high schools, middle schools and elementary schools.
2. types of coeducational industrial arts and homemaking classes being taught.
3. length of innovative classes being taught.
4. grade level of coeducational industrial arts and homemaking being taught.
5. number of teachers who were willing to be consultants for the purpose of helping to evaluate the resource guide.

Development of a Resource Unit

The investigator developed a resource guide integrating industrial arts and homemaking based on concepts related to living in a home. The guide was designed for the late junior high or early senior high school student, and with the hope that it was flexible enough to be used for a semester or for a year course.

The resource guide contains objectives, topics, suggested learnings and activities and teaching aids and outside references which are applicable to student probable ability and/or interest level. The instructional materials in the guide include recent resources in the areas which are available to the average teacher. They were presented within each unit using a different format.

In developing this unit, the investigator used curriculum guides, suggestions from undergraduate and graduate students, teachers, her own ideas and current literature in the areas. An attempt was made to include a wide variety of learning activities and resources so that teachers using the guide would find it flexible and adaptable to their situations.

Follow-up Post Card

A follow-up post card was sent to the 58 respondents who indicated they were willing to be consultants and/or resource people. This post card requested a summer address so that the resource guide could be sent directly to them. It was

also a method for determining those people who were still interested in evaluating the guide.

At the end of three weeks, 35 people responded that they were still willing to be consultants and/or resource people for the guide.

Evaluation of the Resource Guide

When the resource guide was finished it was sent to 12 industrial arts teachers and 23 homemaking teachers for evaluation. An evaluation form was developed which asked specific questions pertaining to the resource guide and method of citing bibliography (appendix B). In the instructions (appendix C), the teachers were requested to answer the questions and to add their comments, either on a separate sheet of paper or directly on the resource guide. At the end of nine weeks, 17 evaluation forms, with comments and suggestions, had been received - 7 from industrial arts teachers and 10 from homemaking teachers. With the help of their comments and suggestions, the objectives, topics, suggested learnings and activities and teaching aids and outside references were then revised. The introduction was reviewed and the bibliography was altered to the form most popular with the industrial arts and homemaking teachers.

IV. ANALYSIS OF DATA

Findings of Exploratory Questionnaire

The investigator believed that there was a real need to identify the current teaching practices in industrial arts and homemaking for boys and girls. Two hundred and twenty-two schools in the state of Oregon received the post card questionnaire which was developed to discover what contemporary classes were being taught in Oregon. After eight weeks, 126 (56 percent) questionnaires were returned. Sixty-two were returned from high schools, 60 were returned from junior high schools, 2 were returned from middle schools, and 2 were returned from elementary schools (table 1).

Of the returned questionnaires, 38 (30 percent) respondents indicated that they did not have any kind of contemporary industrial arts or homemaking programs for boys and girls at the eighth, ninth or tenth grade levels.

Eighty-eight (70 percent) respondents reported that they had one or more of the contemporary programs in their school. Of the 88 schools with contemporary programs, over half were classified as junior high schools. The percent at each level is shown in table 2.

Of the schools which reported contemporary programs, 40 schools had one of the seven programs; 33 schools had two of the seven programs; 10 had three of the seven programs, and one junior high respondent reported that they had six of the

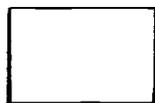
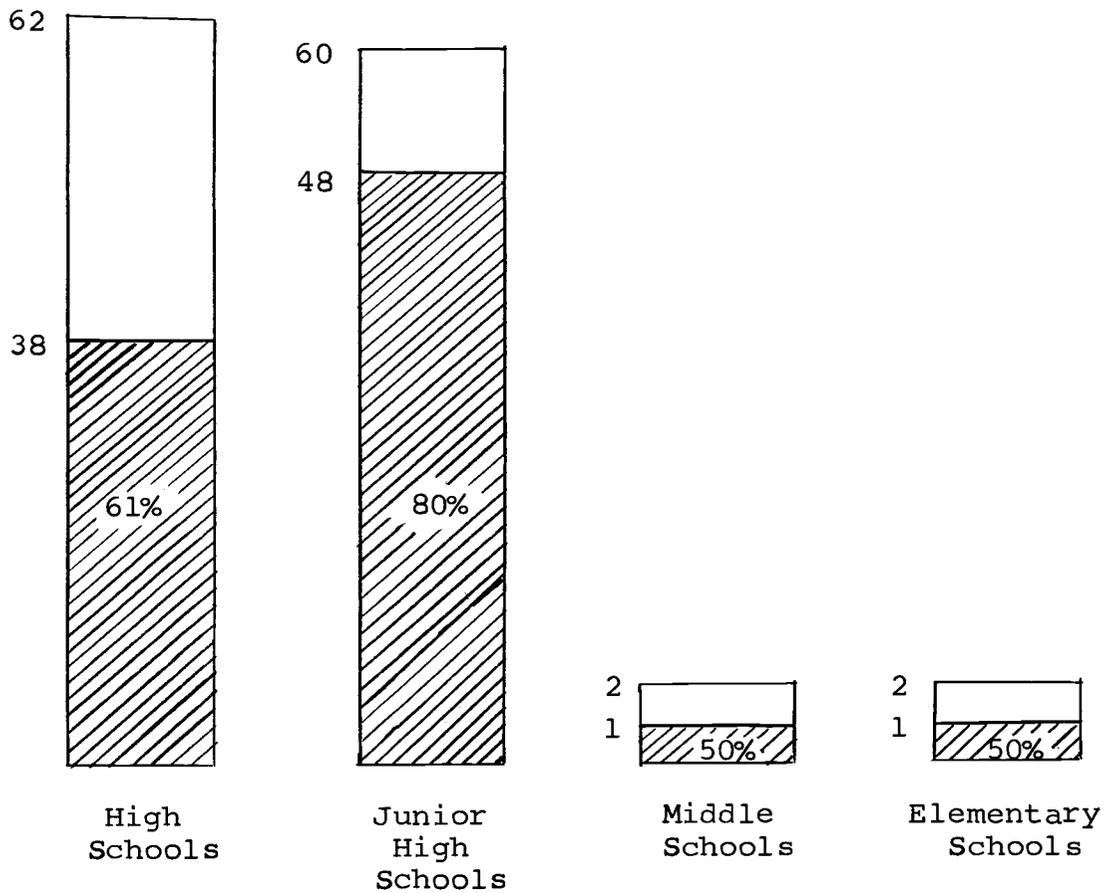
Table 1.

Responses to the Exploratory Questionnaire

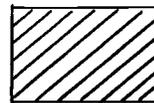
number of post card questionnaires:	sent	received	indicating contemporary programs
High Schools	106	62	38
Junior High Schools	104	60	48
Middle Schools	7	2	1
Elementary Schools	5	2	1
total:	222	126	88

Table 2.

Contemporary Programs in 126 Oregon Schools



total returns



contemporary programs

contemporary programs. The breakdown of contemporary programs was as follows:

50 schools had boys homemaking

22 schools had girls industrial arts

29 schools had coeducational homemaking

37 schools had coeducational industrial arts

11 schools had exchange industrial arts

1 school had a coordinated industrial arts and home-making program

10 schools had other types of contemporary programs

Of the schools which had contemporary programs the courses in boys homemaking, coeducational homemaking and girls industrial arts seemed to be the most popular. It also appeared that these three courses were taught primarily to the eighth and ninth grades on a term or semester basis. Table 3 illustrates the types of courses taught, their length and grade level.

On the questionnaire, the teachers were asked if they would be willing to be a consultant and/or resource person for this study. Fifty-eight individuals representing 38 school indicated they were willing to be consultants and/or resource people. These people were used in evaluating the resource guide after it was written. Some of these people came from schools which did not have any type of contemporary program at the eighth, ninth or tenth grade level. Of the 58 people involved, 21 were industrial arts teachers and 37 were homemaking teachers. Because the guide was not ready to

Table 3

Contemporary Courses in 88 Oregon Public Schools Listed by
Program, Grade and Length

	short	term or semester	year	unknown	total
boys homemaking					
eighth grade	7	10	2	3	22
ninth grade	4	15	5	3	27
tenth grade	1	8	4	0	13
girls industrial arts					
eighth grade	0	12	0	3	15
ninth grade	2	2	5	2	11
tenth grade	0	2	1	0	3
coeducational homemaking					
eighth grade	0	12	0	3	15
ninth grade	1	10	4	1	16
tenth grade	0	5	4	0	9
coeducational industrial arts					
eighth grade	2	12	5	8	27
ninth grade	0	15	6	2	23
tenth grade	0	7	6	0	13
exchange industrial arts and homemaking					
eighth grade	5	2	0	0	7
ninth grade	5	0	0	0	5
tenth grade	0	0	0	0	0
coordinated industrial arts and homemaking					
eighth grade	0	1	0	0	1
ninth grade	0	1	0	0	1
tenth grade	0	0	0	0	0
other types of contemporary programs					
eighth grade	0	3	1	0	4
ninth grade	0	2	1	0	3
tenth grade	0	2	3	0	5
totals:	27	121	47	25	220

be sent by the closing of school, the 58 teachers were contacted by post card and were requested to give a summer address. Thirty-five teachers responded that they were still willing to be consultants and/or resource people and gave their summer addresses.

Teachers Evaluation of the Resource Guide

Nine weeks after the resource guide was sent to the industrial arts and homemaking teachers, 17 (50 percent) were returned with evaluations and comments. Seven were from industrial arts teachers and 10 were from homemaking teachers. As a whole the evaluations and comments were extremely helpful in revising the resource guide.

Introduction. It was felt by the teachers evaluating the resource guide that the introduction provided enough information to use the guide. The only suggestion for improving it would be to use fewer words.

Objectives. As a whole the teachers felt that the objectives within the resource guide were appropriate and met the purpose for which the guide was designed. One teacher felt that there could be fewer objectives in that the amount of material to be covered by the guide as written was impossible to do in one course. A suggestion for additional objectives was to include management of financial resources and comparative shopping. One person felt that there was too much material on metals and metal treatments.

Topics. The teachers who evaluated the resource guide felt the topics included adequately covered the objectives. One teacher felt that Unit I, covering the family, might overlap family life or social studies courses. Suggestions for adding topics included the care and maintenance of a car, boat, truck or recreational vehicle; job opportunities and ways of earning money to finance one's goals; home safety and first aid.

Learning Experiences. From the responses by the teachers evaluating the resource guide, there seemed to be a general consensus that the learning experiences were well done and provided a variety of situations for students. Several teachers raised the question of time, space and money in regards to several of the large learning experiences (i. e. building a fireplace, fence, or bar-b-que). The teachers felt that the learning experiences were realistic and of interest to the students, and suggested additional learning experiences such as building a fish pond; cages and pens for pets; maintaining a home work shop; building a model home with materials native to the area; landscaping with materials native to the area.

Resources. Most of the teachers felt that the resources were very good, however a few felt that more films, filmstrips and guest speakers should be included. One teacher felt that the resources might be difficult to obtain in a school library. The method of citing the bibliography, which was acceptable

to the majority of teachers was in Unit IV. This method listed the title of the book, film, pamphlet or other audio-visual source within the context of the resource guide. At the end of the unit, the resources were stated again in more detail (i.e. author, publisher, date) and listed by topic. Several teachers recommended other resources to include in the guide.

General. Although one teacher felt that the course was a two year course, the rest of the teachers who evaluated the guide felt it could be adapted to either a semester or a year. All of the teachers felt the resource guide would be very helpful and useful to a teacher involved in a homemaking-industrial arts course and several teachers requested a copy of the finished resource guide. Although an industrial arts teacher had been used as a consultant, he was not involved in the actual development of the guide. It was felt by the industrial arts teachers evaluating the guide that the parts involving their area seemed appropriate and adequately covered. Additional comments by the teachers evaluating the guide included ideas and suggestions such as:

perhaps the division of industrial arts and homemaking was complex.

number each page.

include an index and put the heading (i. e. topics, learning experiences, etc.) on each page.

cost of the program might limit the course.

the numbering system within each unit was a good system for reference.

the topics generated lots of ideas.

the course might be good for an adult education class.

the course could include the art department.

the course could be developed into an occupational program.

one industrial arts teacher felt "I could teach my part from this guide."

Generally it appeared that the resource guide was well received by the teachers evaluating it and there should be no drastic changes when revising it.

V. SUMMARY AND RECOMMENDATIONS

The purpose of this study was to develop a resource unit for teaching an integrated course of industrial arts and homemaking at the late junior high or early senior high school level. The investigator, from her own experiences and reading, had several ideas of what such a course should contain. With the aid of suggestions from other people she developed a guide to aid the classroom teacher.

To discover what contemporary classes were being taught throughout the state of Oregon, a post card questionnaire was sent out to 222 schools. Of the 126 questionnaires returned, 88 schools reported they had contemporary courses at the eighth, ninth or tenth grade levels. The length of contemporary course varied from school to school. It appeared that boys' homemaking and coeducational industrial arts were the two contemporary programs taught the most frequently primarily term or semester courses. Of interest to the investigator was that a coordinated industrial arts and homemaking program was nonexistent, except for one school which taught it as a term or semester course. This indicated to the investigator that although there was an interest in contemporary programs, there was not too much being done in the area of coordinated industrial arts and homemaking.

Thirty-five replies to the questionnaire indicated that the industrial arts and homemaking teachers would be willing to be resource and/or consultants for the study. When the

resource guide was ready for evaluation, these people were asked to read the guide and respond to questions on an evaluation form. The responses appeared favorable from the 17 industrial arts and homemaking teachers who returned the evaluations. In general, they felt it could be a useful tool to their teaching and was adaptable to many situations.

Recommendations

As a result of the work in this study, the investigator would like to point out the need for studies which answer the questions:

1. What characteristics of adolescent males and females are important to recognize in order for maximum learning to take place? What teaching methods are the most effective?
2. What are the characteristics of the most effective teachers in coeducational industrial arts and homemaking?
3. What are minimal classroom facilities for teaching an integrated industrial arts and homemaking class?
4. What is a minimal budget for teaching an integrated class?
5. What are effective ways of promoting such a class to counselors? to teachers? to students?

The investigator would recommend further study in the area of an integrated industrial arts and homemaking class. There is need for the continued evaluation of the offerings within such a course to insure the immediate and the future needs of students. With the world ongoing and changing, such a course should be in a continual state of change and updating. Through

continued study a dynamic curriculum could emerge which would attract boys and girls because it would be based on all areas of personal and family living.

BIBLIOGRAPHY

- Adams, Eleanor. October, 1971. High school batchelors break away from tradition. Forecast 17(2):F-47.
- American Home Economics Association. 1967. Concepts and generalizations; their place in high school home economics curriculum development. Report of a national curriculum development project. Washington D. C. 63 p.
- Baker, Luther G. October, 1971. Male role in home economics. Forecast 17(2):F-47.
- Behavior patterns of early adolescents. N. D. Illinois Teacher of Home Economics 3(4):155-165.
- Bristow, William H. et al. 1941. Family living and our schools. New York, D. Appleton-Century. 468 p.
- Brodhead Garret Co. N. D. Meeting the needs of today's environmental living. Educational consultant division, Cleveland, Ohio.
- Budewig, F. Caroline. August, 1957. Origin and development of the home economics idea. Published doctoral dissertation. George Peabody College for Teachers. 325 p.
- Byrd, Flossy M. June, 1970. A definition of home economics for the seventies. Journal of home economics 62(6):411.
- Clark, William G. October, 1970. You can't weld in a mini skirt. School arts 70(2):22-25.
- Cochran, Leslie H. 1970. Innovative programs in industrial education. Bloomington, Illinois, McKnight and McKnight. 179 p.
- Eyler, Ruth, Gertrude Lewis and Ruth Totman. 1969. Teach us what we want to know. Connecticut state board of education. 179 p.
- Fleck, Henrietta. 1968. Toward better teaching of home economics. New York, Macmillian. 402 p.
- Force, Elizabeth S. 1962. Teaching family life education, the Tom's River program. New York, Bureau of publications, Teachers College, Columbia University. 38 p.
- Golden, Cecilly. 1953. The needs of adolescent males for homemaking education. Master's thesis. Corvallis, Oregon State College. 152 p.

- Goode, Carter V. 1959. Dictionary of education. Second edition. New York, McGraw-Hill. 676 p.
- Groneman, Chris H. 1954. Modern shop organization for industrial arts classes, Can-pro corporation. 50 p.
- Hall, Olive A., and Beatrice Paolucci. 1970. Teaching home economics. Second edition. New York, Wiley. 459 p.
- Hass, G., K. Wiles and J. Bondi. 1970. Readings in curriculum. Boston, Allyn and Bacon. 708 p.
- Havinghurst, Robert J. 1953. Human development and education. New York, David McKay. 338 p.
- Hoover, Kenneth H. 1964. Learning and teaching in the secondary school. Boston, Allyn and Bacon. 543 p.
- Hurlock, Elizabeth B. Winter, 1966. American adolescents of today -- a new species. Adolescence 1:7-12.
- Mather, Mary. January-February 1971. What will the seventies require of home economics. Illinois Teacher of Home Economics SIV(3):101.
- Men are important too! 1971. Tips and Topics in Home Economics XI(2):8.
- Miller, Ramah Driskill. 1968. A research project to develop curriculum for a family living course attractive to high school boys. Master's thesis. Norman, University of Oklahoma. 83 p.
- Moore, Margurite C., Connie DeHogg Beasley and Eleanor M. Moore. May, 1970. Why the boys? Journal of Home Economics 61(5):338.
- Nelson, Helen Y. April, 1970. Review and synthesis of research on home economics education. ERIC Clearinghouse on Vocational and Technical Education, the Center for Vocational and Technical Education, the Ohio State University. 61 p.
- Otto, Arleen C. 1958. New designs in homemaking programs in junior high schools. Published doctoral thesis. Teachers College, Columbia University, New York.
- Smith, William M. 1966-67. The family roles of modern man. Illinois Teacher of Home Economics 10(1):106.
- State Department of Education. 1967. Industrial arts in Oregon schools. Salem, Oregon. 170 p.

- Streichler, Jerry. August, 1966. Review and synthesis of research in industrial arts education. ERIC Clearinghouse on Vocational and Technical Education, the Center for Vocational and Technical Education, the Ohio State University. 88 p.
- Strengthening Johnny's knowhow and knowwhy. November, 1969. School Shop, Industrial Technical Education XXIX(3):39.
- Teenage fads: groovy or uptight? April 25, 1968. Senior Scholastic.
- Webster Handy College Dictionary. 1955. 543 p.
- Williamson, Maude and Mary Stewart Lyle. 1954. Homemaking education in the high school. Third edition. New York, Appleton-Century-Crofts. 423 p.

APPENDICES

APPENDIX A

Dear Oregon Teachers of Homemaking and
Industrial Arts:

48

I am seeking your help in identifying how many programs are currently being taught in Oregon which include boys and girls in homemaking and industrial arts at the late junior or early senior high school level. This is a part of the work for my thesis and a M. S. in home economics education. I am hoping to develop a resource guide which will include concepts from homemaking and industrial arts so as to integrate the two subjects.

I would appreciate the homemaking and industrial arts departments collaborating in filling out the questionnaire in that only one is being sent per school. Please return immediately. Thank you very much for your assistance.

Yours very truly,

Name(s) _____

School _____ Address _____

Please check the types of programs offered in your school:

classes in:	grade level			number of wks?	no. yrs. program has existed?
	8	9	10		
boys Hmkg					
girls IA					
coed Hmkg					
coed IA					
exchange Hmkg-IA					
coordinated Hmkg-IA					
other (list)					

comments:

Names of teachers in your school willing to be consultants on the resource guide. You need not have a program now to serve as a consultant. (If you indicate an interest you will be contacted later).

Our school is not interested in this study at this time, however we would like further information about the study when it is complete.

yes _____ no _____

APPENDIX B

Evaluation of Resource Guide

Introduction:

1. Does the introduction provide enough information to use the resource guide?
2. Suggestions to make the introduction more clear:
OR
Questions you have that the introduction should include:

Objectives:

3. Do the overall objectives seem appropriate for the age that the resource guide was designed for?
If NO, is it too elementary? or too advanced?
4. Do the overall objectives seem to meet the purpose for which the guide was designed as stated in the introduction?
If NO and items 5, 6, 7 and 8 below do not give the opportunity for you to indicate why you say "no," please explain on the back of this page.
5. Are there any major omissions in the general objectives within each unit?
6. Suggestions for other general objectives:
7. Are there things in the general objectives which are totally irrelevant?
8. Suggestions for irrelevant general objectives which should be omitted:

Topics:

9. Understanding that any part of the resource guide can be expanded, do you feel that the items in the first column under the heading Topics adequately covered the objectives?
10. Suggestions for deleting some of the Topics:
11. Suggestions for adding to the Topics:

Learning Experiences:

12. Are the learning experiences feasible?
13. Are they realistic?
14. Are they of interest to students?
15. Are they appropriate to the objectives?
16. Do you feel that some of the suggestions in the resource guide stimulate thinking on the part of the teacher so that he or she might come up with other ideas and activities?
17. Suggestions for other learning activities: (Use additional paper if necessary please).

Resources:

18. Do the resources listed seem to be appropriate?
19. Which style of listing the references is the most comfortable for you to work with? Rank in order of preference, number one (1) being high.
 Unit I _____, Unit II _____, Unit III _____, Unit IV _____,
 Unit V _____, Unit VI _____, Unit VII _____.
20. Do you know of other major resources which would be helpful in this resource guide? What:

General:

21. Does the resource guide seem to be adaptable so that either a semester or a year course could be developed from it?
22. Would it be useable and helpful to a teacher involved in a homemaking-industrial arts course?
23. Although an industrial arts teacher has been used as a consultant, he has not been involved in the actual development of the guide. Do the parts of the guide involving industrial arts seem appropriate and adequately covered?
24. Additional suggestions and comments about the guide: (feel free to use additional pages please).

APPENDIX C

Yvonne M. Stubbs
Home Economics Education
Oregon State University
Corvallis, Oregon 97331

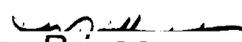
Dear _____,

Enclosed is a resource guide and evaluation form which I have designed as partial fulfillment for a master's degree in home economics education. I have some very strong feelings that there is a need to give girls an opportunity to become familiar with industrial arts and boys to become familiar with homemaking at a practical level. Too many people in our society have missed having help in being able to deal with the problems involved in keeping a home functioning and I feel we can contribute to creating better family members by teaching integrated courses of homemaking and industrial arts at the late junior or early senior high school level. It appears that at this level we can reach more students.

The enclosed guide is by no means complete. It is hoped that it is flexible enough to adapt to any school system and to any community. However, I am sure there are areas of the resource guide which could be improved upon or added to. I would very much appreciate your help in identifying those areas. Each section of the resource guide is numbered by unit and has numbers on each unit. You may wish to jot comments directly on the resource guide and send it back to me or just identify your comments by the number on a piece of paper - either way is perfectly acceptable. Please also use the evaluation form. The references are listed differently in each unit, please identify which would be most useable for you.

When I have received your comments and ideas for additions or deletions, I will revise the resource guide and have it printed. At this time I cannot forecast what the cost will be, however if you are interested in having a revised copy please let me know and I will inform you of the cost as soon as it is available. I would like to have the resource guide printed and in your hands, if you would like a copy, before school starts in the fall. I know you have a busy schedule and this is your "vacation" time, however I would appreciate it very much if you would send your comments to me as soon as possible so that I may begin compiling them.

Thank you very much for your time and help and ideas. I'm very excited about the resource guide and hope to use it soon, but mainly I hope you will be able to use it too.

Sincerely,

Redacted for Privacy

A Resource Guide for a Late Junior or Early Senior
High School Unit on Family Responsibilities
Integrating Industrial Arts and Homemaking

compiled and written by:

Yvonne M. Stubbs

Introduction

Background: The roles of men and women and of boys and girls are changing. Until comparatively recent times, the roles of male and female were clear cut and divided more or less according to sex. This is not so true now. The claim can no longer be made that woman's place is in the home and man's place is in the world of work. Women are entering the labor market in greater numbers every year. In many homes the men and boys are sharing more duties related to the home. It seems that it is essential that boys and girls be educated better for their present and future roles as family members.

Construction: The resource guide has been designed to provide a framework of topics, objectives, suggested learnings and resource information. Using the premise that all students will eventually become involved in living in a home of some form, the resource guide has been developed around the basic needs related to living in and maintaining a home. The resource guide should be viewed as only a basic framework of topics and ideas to be taught. It is the hope of the author that the resource guide is flexible and that teachers using it will expand or delete areas they feel are applicable to their student's needs and/or situations.

Although the author has a limited background in industrial arts, she has tried to provide a balance of experience in industrial arts and home-making. The resource guide emphasizes home living and primarily covers topics directly involved with the selection, care and repair of the home and its furnishings. However, other areas of concern have been incorporated; Unit I, Understanding families; Unit II, Relationships, values and attitudes; and so forth. It is hoped that as teachers use the guide, they will see other ways of incorporating topics which are important for their students to know to more adequately cope with life and the changing world.

Structure: The resource guide is divided into seven (7) units, each a part of the overall scope of the course. Each unit is organized into four (4) subdivisions:

- I. Topics - an outline of the general areas to be included in the unit.
- II. Objectives - at least one major objective related to the topics is included. The objectives are not necessarily stated behaviorally, although they could be expanded with learning outcomes stated for each learning activity. It was the feeling of this author that simplicity in constructing the guide would make it far more flexible and a greater number of people would benefit from it. Many other objectives could be identified for each topic.
- III. Learning Activities - this section contains some ideas of material for the teacher to present and/or assignments for students to do which are related to the objective. The list of activities is definitely not complete and the teacher should not consider that the suggestions are the only way a student may achieve the identified objectives.
- IV. Resources - are available to every teacher - either through purchase, loan, gift or teacher made. Again, the amount of material available for use in the classroom is endless. In this resource guide, an attempt has been made to suggest resources which are current, easily available and appropriate to the subject. Some resources are for student use and some are for teacher reference.

The resource guide has been designed to be flexible enough so that the length of the course could be a semester or a full year depending on the structure of the school. A full year course would enable going into more depth in those areas the teacher feel students have a need for or to spend more time working on projects in the homemaking department or the industrial arts department.

The resource guide has also been designed to encourage the homemaking teacher and the industrial arts teacher to work together in presenting the material. There should be a free movement between the momemaking and industrial arts laboratories.

Course Content

Unit I. Introduction

- Changes in family life
- Other cultures
- Library resources
- Family patterns
- Families in the future
- Family functions

Unit II. Planning and Choosing a Home

- Factors in the choice of housing
- Relationships in members of the family
- Financial policies

Unit III. The Outside of the House

- Landscaping
- Family Leisure

Unit IV. Keeping a Home Functioning

- Walls - their care
- Doors and windows
- Cement, plaster, tile, water-proofing and brick
- Various utilities

Unit V. Principles of Design

- Interior design
- Art principles
- Accessories for the home

Unit VI. Use and Care of Appliances

- Large appliances
- Small appliances
- Simple repairs
- Plastics
- Metals

Unit VII. Care of Furnishings

- Types of wood
- Care of wooden surfaces
- Repair of wooden furniture
- Types and care of floor coverings
- Types of window treatments
- Care and repair of window treatments
- Types of furniture
- Care and repair of furniture
- Making or renovating furniture

UNIT I

To recognize and appreciate the values of studying the home and environment.

Topics	Objectives	Learning Activities	Resources
<p><u>1.1</u> Family life is changing. Family roles are not as clearly divided as they once were.</p> <p><u>1.2</u> Present day conditions of family life include:</p> <p>A. lessened self-sufficiency of the family unit and dependency on outside agencies.</p> <p>B. shift of family from producing to consuming unit.</p> <p>C. shift in relative importance of family functions, increased importance of the affectual function.</p> <p>D. variety in family patterns.</p> <p>E. early marriage</p>	<p><u>1.1</u> To understand the changes which have occurred in family life.</p>	<p><u>1.1</u> Give each student a course outline with references listed. Discuss and explain.</p> <p>Get acquainted: Give each student a piece of construction paper - divide it into 4 sections and illustrate: your family, your interests, your goals and what bugs you.</p> <p><u>1.2</u> Read 2 magazine articles or sections from books to the class which are descriptive of family life 100 years ago and of the present. Discuss how family life has changed and what roles were then and are now.</p> <p>Students work in small groups to present minute dramas which show examples of how the changes in society have affected family life. Which show desirable changes? Why?</p>	<p><u>1.1</u> Course outline.</p> <p>References: Duvall, <u>Family Development</u>. Smart & Smart, <u>Living in Families</u>. Bowman, <u>Marriage for Moderns</u>.</p> <p><u>1.2</u> Films: <u>Our Changing Family Life</u>.</p>

Unit I. Continued.

Topics	Objectives	Learning Activities	Resources
<p>F. increased mobility. G. increased proportion of working mothers. H. interchanging and complex roles of family members. I. family welfare affected by community decisions and world tensions. J. increased mechanization in the household.</p> <p><u>1.3</u> Changes in society which influence family life include: A. expanding knowledge in all areas. B. shrinking world and universe. C. emergence of new nations and groups. D. space exploration. E. developments in communication. F. urbanization and suburbanization. G. increasing life span. H. explosive population growth. I. premium place on "youthfulness." J. technological advance. K. fewer job opportunities for the unskilled. L. necessity for re-education for jobs.</p>		<p>Find pictures in magazines that illustrate changes in society influencing families. Make a bulletin board of pictures.</p> <p><u>1.3</u> Brainstorm what male and female roles might be and discuss how these effect what each person needs to know to be a productive family member.</p>	<p><u>1.3</u> "The Family Roles of Modern Man."</p>

Unit I. Continued.

Topics	Objectives	Learning Activities	Resources
<p>M. increased number of women working.</p> <p>N. shorter work week.</p> <p>O. commuting workers.</p> <p>P. high rate of juvenile delinquency and mental illness.</p>			
<p><u>2.1</u> An understanding of family patterns of other cultures facilitates the understanding of the nature of families in our own society.</p>	<p><u>2.1</u> To understand some cultural differences in families.</p> <p><u>2.2</u> To become familiar with the library and resources available.</p>	<p><u>2.2</u> Students research and report on a family of a different culture.</p>	<p><u>2.1</u> Films: Argentina (<u>People of the Pampa</u>). <u>Blue Men of Morocco</u>. <u>Four Families</u>.</p>
<p><u>3.1</u> Family is a general term which can be classified in many ways.</p>	<p><u>3.1</u> To identify family patterns.</p>	<p><u>3.1</u> Define family.</p> <p>List and define terms relating to kinds of marriages and different family patterns.</p>	<p><u>3.1</u> "Kibutz Families."</p>
<p><u>4.1</u> With the changes in family life, where are we going?</p>	<p><u>4.1</u> To predict family patterns of the future.</p>	<p><u>4.1</u> Read excerpts from predictions of the future and discuss how the students think their lives will change by the time they retire.</p>	<p><u>4.1</u> East, Marjorie. "Family Life by the Year 2000." Tofler, <u>Future Shock</u>. Reich, <u>Greening of America</u>.</p>

Unit I. Continued.

Topics	Objectives	Learning Activities	Resources
<p><u>5.1</u> The basic functions of the family include reproduction, care and socialization of the children, and affectional interaction of family members.</p>	<p><u>5.</u> To understand the function of a family regardless of the pattern it takes.</p>	<p><u>5.1</u> Reading assignment: Landis, <u>Personal Adjustment, Marriage and Family Living.</u> Englewood Cliffs, N. J. Prentice Hall, Inc. 1960. Chapter 1.</p> <p>Discuss the functions and responsibilities of the family.</p>	

Unit I - References

1. 1 Books: Bowman. Marriage for Moderns. New York: McGraw-Hill, 1960.
Duvall, Family Development, Philadelphia: J. B. Lippincott Co. , 1962.
Smart and Smart. Living in Families. Boston: Houghton Mifflin Co. , 1958.
1. 2 Films: Our Changing Family Life. 22 minutes, B & W. OSU.
1. 3 Magazines: "The Family Roles of Modern Man." Illinois Teacher, Vol. X, No. 1, Fall, 1966-1967.
2. 1 Films: Argentine (People of the Pampa). 16 minutes. B & W. OSU.
Blue Men of Morocco. 28 minutes. Color. OSU.
Four Families. 58 minutes. B & W. OSU.
3. 1 Magazines: "Kibutz Families." Life. December, 1971.
4. 1 Books: Reich. Greening of America. Bantam Books, New York, 1970.
Tofler. Future Shock. Bantam Books, New York, 1970.
- Magazines: East, Marjorie. "Family Life by the Year 2000." Journal of Home Economics. January, 1970. Vol. 62, No. 1.

UNIT II

To help students develop judgement in planning and choosing a home.

Topics	Objectives	Learning Activities	Resources
<p><u>1.1</u> Influence in the choice of housing: Housing provides the physical, emotional and social development of individuals and family members.</p> <p><u>1.3</u> Individual and family needs, values, and attitudes influence the form and use of housing. Other human factors such as educational background, abilities and skills also have an influence on family housing.</p>	<p><u>1.1</u> To become aware of the factors which influence a family's choice and use of housing.</p> <p><u>1.2</u> To realize there are certain behavioral patterns that characterize a person at a certain age and one must realize these to live happily in a family.</p>	<p><u>1.2</u> Role play relationships between mother-father; parents-children; siblings; teenagers-friends (at home). What are conflicts? What conclusions about the house and the use of space within the house are related to getting along with others.</p> <p><u>1.3</u> Make a bulletin board of words on house silhouettes of construction paper showing the human factors involved in the choice of housing.</p> <p>Discuss the importance of respect for one another's needs and desires within the family.</p>	<p><u>1.1</u> Films or pictures of travelers. Speakers who have traveled. Magazines from other countries showing homes and furnishings.</p> <p><u>1.2</u> Pamphlets (S. R. A.) Getting Along with Brothers & Sisters Understanding Yourself How to Live with Parents</p>

Unit II. Continued.

Topics	Objectives	Learning Activities	Resources
<p><u>1.4</u> Housing standards are influenced by income, values, attitudes, educational background and housing knowledge.</p>		<p><u>1.4</u> Discuss values and attitudes. What are they and how do we deal with them? How are they different between families and between family members?</p>	
<p><u>1.5</u> The individual's or families physical, social and psychological needs, way of living, and resources influence the choice of dwelling, furnishing and equipment.</p>		<p><u>1.5</u> Write a descriptive paper of a family and their home. Tell why they have the type of house they have.</p>	
<p><u>1.6</u> An individual's or family's requirements for housing change with varying conditions of society, and with variations in the family situation.</p>	<p><u>1.6</u> To realize times, situations and people change.</p>	<p><u>1.6</u> Compare housing of today with that of 25 years ago.</p> <p>Study the family life cycle to consider demands of the family on the dwelling - home use, social, family growth.</p>	<p><u>1.6</u> Old magazines to show illustrations. Film: "Main Street U. S. A." Transparencies.</p>
		<p>Discuss what a family should consider about itself when selecting a home (sport, recreation, privacy, work).</p>	<p>Articles concerning families with different life cycles and needs.</p>
<p><u>1.7</u> Services, facilities and utilities supplied by the neighborhood and/or community affect the ways by which an individual or family satisfies its housing needs and wants.</p>	<p><u>1.7</u> To be aware of some community influences which effect the choice of housing.</p>	<p><u>1.7</u> Study locations of housing related to sewer line, schools, shopping, churches and zoning and family needs.</p>	<p><u>1.7</u> Pamphlet: Selecting a Liveable Neighborhood</p>

Unit II. Continued.

Topics	Objectives	Learning Activities	Resources
<p><u>1.8</u> Housing is a most important investment and should take considerable evaluation of the family's needs and values.</p>		<p><u>1.8</u> Look at floor plans for various size families and consider their needs.</p> <p>Taking into consideration some of the points previously considered, as a class make a check list to evaluate housing. (As the course progresses add to this list).</p> <p>Visit housing in the community. Using the check list, evaluate it.</p>	<p><u>1.8</u> <u>Homes with Character</u></p> <p>Real estate floor plans Home-plan magazines</p> <p>Resource people: city officials city manager urban renewal director</p>
<p><u>2.1</u> Housing is an integral part of over-all financial management and requires the making of rational decisions with regard to fitting housing expenditures with individual and family income.</p>	<p><u>2.1</u> To acquire some knowledge of financial policies, procedures and costs of housing</p>	<p><u>2.1</u> Find out the housing cost from home owners or real estate agents in your area, including taxes, insurance, etc. Find out the cost of rent and compare.</p> <p>Discuss renting; houses, apartments, duplex. Buying: houses, mobile homes, owning apartments.</p>	<p><u>2.1</u> Pamphlets: <u>The Shelter Dollar</u></p> <p>Real estate dealer</p> <p>Bankers</p> <p>U. S. D. A. Publications</p> <p>Current magazines & newspapers</p>

Unit II. Continued.

Topics	Objectives	Learning Activities	Resources
<p><u>2.2</u> The cost to build a home can be roughly estimated as can the cost of an addition to a home.</p>		<p><u>2.2</u> Compute how much a home cost by figuring square footage, etc.</p> <p>Discuss hidden costs. Compute the cost of a \$15,000 house with \$3000 down payment on a 30 year contract at 8% interest.</p> <p>Discuss set backs, termite inspection, sanitation requirements, zoning, subdivision, restrictions insurance requirements and costs.</p>	

Unit II - References

1. 1 Books: Ahern, Nell Giles, Teenage Living. Boston: Houghton-Mifflin Co. , 1960.
- Allen, Betty and M. P. Briggs. Mind Your Manners, revised edition. Philadelphia: J. P. Lippincott Co. , 1964.
- Craig, Hazel. Thresholds to Adult Living. Peoria, Illinois: Charles A. Bennet Co. , Inc. , 1962.
- Craig, Hazel Thompson and Ola Day Rush. Homes With Character, rivised edition. Boston: D. C. Heath and Co. , 1966.
- Clayton, Nanalee. Young Living. Peopria, Illinois: Charles A. Bennett Co. , Inc. , 1963.
- Duvall, Evelyn and Pauline Hill. When You Marry, high school edition. Boston: D. C. Heath and Co. , 1962.
- Duvall, Evelyn Millis. Family Living. New York: The Macmillan Co. , 1961.
- Helper, Donald and Paul Wallach. Housing Today. New York: McGraw-Hill Book Co. , 1965 (paperback).
- Heaflin, Ruth M. Essentials of Family Living. New York: John Wiley and Sons, Inc. , 1960.
- Landis, Judson T. and Mary G. Landis. Personal Adjustment, Marriage and Family Living, revised edition. Englewood Cliffs, New Jersey: Prentice-Hall Inc. , 1970.
- Landis, Judson T. and Mary G. Landis. Building Your Life, 3rd edition. Englewood Cliffs, New Jersey: Prentice-Hall, Inc. , 1964.
- Lewis, Doris S. , Jean Burns and Esther F. Segner. Housing and Home Management. New York: The Macmillan Co. , 1961.
- Smart, Mollie Stevens and Russel Cook Smart. Living in Families. Boston: Houghton-Mifflin Co. , 1965.
- Soreson, Herbert and Marguerite Malm. Psychology for Living, 2nd revised edition. New York: McGraw-Hill Books, 1964.

1.2 Booklets and Pamphlets: Getting Along with Brothers and Sisters, S. R. A.
How to Live with Parents, S. R. A.

Understanding Yourself, S. R. A.

1.6 Films: Main Street U. S. A. Modern Talking Pictures.

1.7 Booklets and Pamphlets: Buying or Building a Home, Better Business Bureau.

Selecting a Liveable Neighborhood, California Extension Service.

2.1 Booklets and Pamphlets: Designs for Low Cost Wood Homes. 25¢. Consumer Product Information, Washington, D. C. 10407.

House Construction: How to Reduce Costs. 10¢. Consumer Product Information, Washington, D. C. 10407.

Selecting and Financing a Home. 15¢. Consumer Product Information, Washington, D. C. 10407.

The Shelter Dollar. Household Finance Corp.

Film: What You Should Know Before You Buy a Home. 27 minutes. United States Savings and Loan League. Modern Talking Picture Service, 1212 Avenue of the Americas, New York, New York 10036.

2.2 Booklets and Pamphlets: Aladdins' Homes, 25¢. The Aladdin Co., Bay City, Michigan 48706.

Cut-To-Fit-Homes, 25¢. International Mill and Timber Co., Bay City, Michigan.

Consumer Protection - Interstate Land Sales. Consumer Product Information, Washington, D. C. 20407.

Deck House, Inc., \$1.50. Deck House, Inc. 930 Main St., Acton, Mass. 01720.

Designs for Low Cost Wood Homes, 25¢. Consumer Product Information, Washington, D. C. 20407.

Design for Modern Living, \$1.00. Trailer Coach Assn. , 1340 West Third St. , Los Angeles, California 90017.

Fireplaces and Chimneys, 20¢. Consumer Product Information, Washington, D. C. 20407.

Garages. Weyerhaeuser Co. , Box B, Tacoma, Washington 98401.

Hicks, Symbol of Quality. Dave Hicks, Co. , Inc. , Box 1350, Grand Prairie, Texas.

Home Buying Veteran. Consumer Product Information, Washington, D. C. 20407.

Home Improvement Booklets, 25¢ each. Better Home for All America, Dept. BN5, 1716 Locust St. , Des Moines, Iowa 50303.

Kingsberry Homes, 25¢. Kingsberry Homes, 5096 Peachtree Rd. , Chamblee, Ga.

Know the Soil You Build On, 15¢. Consumer Product Information, Washington, D. C. 10407.

Let's Consider Cooperatives. Consumer Product Information, Washington, D. C. 10407.

Low Cost Wood Homes for Rural America, \$1.00. Consumer Product Information, Washington, D. C. 10407.

Mobile Home Life, 50¢. Mobile Home Manufacturers Assn. , 20 North Wacker Dr. , Chicago, Ill. 60606.

New Holiday Homes, \$1.50. Weyerhaeuser Co. , Box B, Tacoma, Washington 98401.

Pointers for the Veteran Homeowner. Consumer Product Information, Washington, D. C. 10407.

Preventing Cracks in New Wood Floors, 5¢. Consumer Product Information, Washington, D. C. 10407.

Soils and Septic Tanks, 15¢. Consumer Product Information, Washington, D. C. 10407.

Techbuilt Homes, \$1.00. Techbuilt, Inc. , 127 Mt. Auburn St. , Cambridge, Mass. 02138.

Wood-Frame House Construction, \$2. 25. Consumer Product Information, Washington, D. C. 10407.

Films: Better Farm Homes with Concrete. 27 minutes. \$1.00 rental. Portland Cement Assn., c/o Film Library, New York State College of Agriculture, Roberts Hall, Cornell University, Ithaca, New York 14850.

UNIT III

To recognize ways of making a home attractive from the outside.

Topics	Objectives	Learning Activities	References
<p><u>1.1</u> Principles of landscape design. Planning and drawing: landscape walks and drives grading trees and shrubs flowers the garden</p> <p><u>1.2</u> Lawn Care soil preparation seeding a lawn feeding a lawn lawn mowing</p> <p><u>1.3</u> The lawn mower selection care maintenance</p>	<p><u>1.1</u> To realize that certain planning and care of the areas surrounding the house influence it's beauty and enjoyment.</p>	<p><u>1.1</u> Draw a landscaping plan for a home.</p> <p><u>1.2</u> Care for a lawn</p> <p><u>1.3</u> Evaluate several types of mowers. Discuss the advantages and disadvantages of the rotary and the reel. Discuss types of engines and the fuel required.</p> <p>Do simple repairs on a lawn mower.</p> <p>Condition a mower for the winter.</p>	<p><u>1.1</u> Film: <u>Basic Technique for Home Landscaping.</u></p> <p>Pamphlet: <u>Home Planting by Design</u> <u>Landscape Development</u></p> <p><u>1.2</u> Pamphlets: <u>Better Lawns</u> <u>How to Buy Lawn Seed</u> <u>Lawn Weed Control with Herbicides</u> <u>Selecting Fertilizer for Lawns and Gardens</u></p>

Unit III. Continued.

Topics	Objectives	Learning Activities	References
<p><u>1.4</u> Walls, fences, and gateways</p> <p><u>1.5</u> How to select and order plants: number of plants desired trade name size, grade or age shipping information</p> <p><u>1.6</u> How to plant trees and shrubs: planting seasons planting trees and shrubs planting roses or bulbs</p> <p><u>1.7</u> How and when to prune trees.</p> <p><u>1.8</u> How and when to prune shrubs.</p>		<p><u>1.4</u> Construct a wall, fence, or gateway.</p> <p><u>1.5</u> Select, order and plant a garden.</p> <p><u>1.6</u> Plant trees, shrubs and bulbs</p> <p><u>1.7</u> Prune trees.</p> <p><u>1.8</u> Prune shrubs.</p>	<p><u>1.5</u> Pamphlets: <u>The Bissell Home Handbook of Gardening Flowers and Plants... Their Care and Arrangement</u> <u>See What Seeds Can Do For You</u></p> <p><u>1.6</u> Resource persons: garden club representative florist</p> <p><u>1.7</u> Baumgardt, <u>How to Prune Almost Everything</u></p> <p><u>1.8</u> Visit a nursery.</p>
<p><u>2.1</u> Leisure is an important element of happy home living.</p> <p><u>2.2</u> Family recreation.</p> <p><u>2.3</u> Family Pets</p>	<p><u>2.1</u> To understand some various ways of spending leisure time.</p>	<p><u>2.2</u> Discuss and participate in some family leisure activities.</p> <p><u>2.3</u> Discuss care, needs and problems.</p>	<p><u>2.1</u> Sports magazines.</p> <p><u>2.2</u> Pamphlets: <u>Happier Vacations</u> <u>Mr. Peanuts Guide to Physical Fitness</u> <u>Hot Tips for Outdoor Living</u></p>

Unit III - References

1.1 Books and Pamphlets: Ants in the Home and Garden, 10¢. Consumer Product Information, Washington, D. C. 20407.

Controlling Mosquitos in Your Home and on Your Premises, 10¢. Consumer Product Information, Washington, D. C. 20407.

For a World of Plenty, Union Carbide Corp., Agricultural Chemicals, 270 Park Avenue, New York, New York 10017.

Home Planting by Design, 25¢. Consumer Product Information, Washington, D. C. 20407.

Landscape Development, \$1.25. Consumer Product Information, Washington, D. C. 20407.

Rats - Let's Get Rid of Them, 5¢. Consumer Product Information, Washington, D. C. 20407.

Films: Basic Technique for Home Landscaping. 12 minutes. Color. OSU film library.

1.2 Books and Pamphlets: Better Lawns, 25¢. Consumer Product Information, Washington, D. C. 20407.

How Much Fertilizer Shall I Use? 5¢. Consumer Product Information, Washington, D. C. 20407.

How to Buy Lawn Seed, 10¢. Consumer Product Information, Washington, D. C. 20407.

Lawn Weed Control with Herbicides, 15¢. Consumer Product Information, Washington, D. C. 20407.

Selecting Fertilizer for Lawns and Gardens, 10¢. Consumer Product Information, Washington, D. C. 20407.

1.5 Books and Pamphlets: The Bissell Home Handbook of Gardening, \$1.00. Bissell Inc., Grand Rapids, Mich. 49501.

Flowers and Plants . . . Their Care and Arrangement. Society of American Florists, Sheraton-Park Hotel, Washington, D. C. 20008.

Growing Flowering Annuals, 10¢. Consumer Product Information, Washington, D. C. 20407.

Growing Ground Covers, 15¢. Consumer Product Information, Washington, D. C. 20407.

Growing Ornamentals in Urban Gardens, 15¢. Consumer Product Information, Washington, D. C. 20407.

Growing Tomatoes in the Home Garden, 10¢. Consumer Product Information, Washington, D. C. 20407.

Hand Sprayers and Dusters, 10¢. Consumer Product Information, Washington, D. C. 20407.

Pointers on Pesticides. Consumer Production Information, Washington, D. C. 20407.

Roses for the Home, 15¢. Consumer Product Information, Washington, D. C. 20407.

See What Seeds Can Do For You. (slide program). Dept. A, National Garden Bureau, 1458 Chaplin, Birmingham, Mich. 48008.

Spring Flowering Bulbs, 10¢. Consumer Product Information, Washington, D. C. 20407.

Suburban and Farm Vegetable Gardens, 40¢. Consumer Product Information, Washington, D. C. 20407.

Summer Flowering Bulbs, 10¢. Consumer Product Information, Washington, D. C. 20407.

1. 6 Booklets and Pamphlets: Maple Diseases and Their Control: A Guide for Homeowners, 10¢. Consumer Product Information, Washington, D. C. 20407.

Spraying and Other Controls for Diseases and Insects That Attack Trees and Shrubs, 35¢. Consumer Product Information, Washington, D. C. 20407.

Trees for Shade and Beauty, Their Selection and Care, 10¢. Consumer Product Information, Washington, D. C. 20407.

1. 7 Books: Baumgardt, John Phillip. How to Prune Almost Everything. M. Barrows and Company, Inc., New York. 1968.

1. 8 Booklets and Pamphlets: Selecting Shrubs for Shade Areas, 10¢. Consumer Product Information, Washington, D. C. 20407.

2. 1 Booklets and Pamphlets: Insects and Related Pests of House Plants, 10¢. Consumer Product Information, Washington, D. C. 20407.

Minigardens for Vegetables, 15¢. Consumer Product Information, Washington, D. C. 20407.

Selecting and Growing House Plants, 15¢. Consumer Product Information, Washington, D. C. 20407.

2.2 Booklets and Pamphlets: Happier Vacations. The Coleman Co., Inc., Dept. U, Wichita, Kan. 67201.

Hot Tips for Outdoor Living. Sterno Inc., and Colgate-Palmolive Co., J. D. Bates, Jr., P. O. Box 2294, Grand Central Station,
New York, New York 10017.

Mr. Peanuts Guide to Physical Fitness. Standard Brands Incorporated, Educational Service, P. O. Box 2695, Grand Central Station,
New York, New York 10017.

UNIT IV

To examine the methods involved in keeping a home functioning.

Topics	Objectives	Learning Activities	References
<p><u>1.1</u> Types of walls and their characteristics: stucco - plaster plaster board wood accoustical and plaster ceiling other (tile)</p> <p><u>1.2</u> Proper care and maintenance of: stucco - plaster plaster board</p> <p><u>1.3</u> Minor repairs for: stucco plaster board</p> <p><u>1.4</u> Painting stucco - plaster and plaster board: preparation of new wall preparation of old wall types of finish</p> <p><u>1.5</u> Hanging wall paper: tools needed removing old mixing wall paper paste matching the pattern</p>	<p><u>1.1</u> To appreciate that proper care of the inside walls of a home help to maintain the beauty and enjoyability of one's home.</p> <p><u>1.5</u> To recognize other types of wall treatments.</p>	<p><u>1.1</u> Display examples.</p> <p><u>1.5</u> Prepare a wall for papering. Hang wall paper.</p>	<p><u>1.1</u> <u>The High Cost of Cheap Construction.</u> <u>Wood - Colors and Kinds</u></p> <p>Film: From Trees to Lumber</p> <p>Visit various homes under construction.</p> <p><u>1.4</u> <u>Guide to Better House Painting</u> <u>How to Paint the Outside of Your Home</u> <u>Exterior Painting</u> <u>Interior Painting</u></p>

Unit IV. Continued.

Topics	Objectives	Learning Activities	References
<p><u>1.6</u> Proper care and maintenance of paneling and other surfaces: purpose of wood finishing painting equipment: types and use of brushes care and use of ladders sand paper method of storing paint how to mix paint how to tint paint care and cleaning of brushes material used storing brushes painting metal surfaces clean surface types of paint prime enameling composition procedure use and application of varnish and finishes lacquer, varnish, shellac, natural</p> <p><u>1.7</u> Minor repairs for paneling and other surfaces</p> <p><u>1.8</u> Types of moldings and their care and repair</p>		<p><u>1.6</u></p> <p>mix paint tint paint clean paint brushes</p> <p>paint metal household furniture - toys test points: weathering drying time abrasion resistance heat resistance</p>	<p><u>1.6</u> <u>Barclay</u> <u>Weldwood</u> <u>Wonderful World of Hardwoods</u> (film) <u>Wood Siding, How to Install It, Paint It, Care for It</u></p>

Unit IV. Continued.

Topics	Objectives	Learning Activities	Resources
<p><u>1.9</u> Cause and remedy of floor and stair squeaks.</p> <p><u>1.10</u> How to apply and care for linoleum.</p> <p><u>1.11</u> How to apply wax.</p>	<p><u>1.9</u> To understand that care and repair of floors or stairs contribute to the enjoyment of one's home.</p>	<p><u>1.9</u> Silence floor squeaks. Tighten floor squeaks.</p> <p><u>1.10</u> Lay linoleum.</p> <p><u>1.11</u> Wax and buff a floor.</p>	<p><u>1.9</u> <u>Oak Floors, A Home Owner's Guide</u></p>
<p><u>2.1</u> Types of doors: wooden - hollow & solid other</p> <p><u>2.2</u> Types and repair of doors: hinged sliding-single and double swinging folding</p> <p><u>2.3</u> Door and lock repairs analysis of common door ailments causes of door latch failing to catch</p>	<p><u>2.1</u> To appreciate that doors and windows must function properly for the enjoyment of one's home.</p>	<p><u>2.1</u> Display examples</p> <p><u>2.2</u> Install door bumpers Lubricate door hinges Install screen door springs</p> <p><u>2.3</u> Adjust door knobs Lubricate a cylinder lock Install a lock Repair a sticking door Adjust strike plate</p>	<p><u>2.1</u> <u>How to Buy a Good Window</u> <u>Introducing Anderson</u> <u>Perma Shield</u> <u>Windows and Gliding Doors!</u> <u>Reuten Tru-Wall Wood Casement</u> <u>Windows</u> <u>Window Information</u></p>

Unit IV. Continued.

Topics	Objectives	Learning Activities	Resources
<p><u>3.1</u> Types and repair of windows: solid sash metal frame other</p> <p><u>3.2</u> Windows: causes of sticking caulking care and maintenance of steel windows aluminum windows</p> <p><u>3.3</u> Window screens: types of screens method of patching screens care of screens</p> <p><u>3.4</u> Window shades: types of window shade materials shade roller construction window shade tension</p>		<p><u>3.2</u> Replace broken sash cord Adjust a window that sticks Cut glass - mix putty Replace broken window pane Caulk windows & doors</p> <p><u>3.3</u> Make a window screen Make a storm sash Reinforce a window screen Repair a window screen Patch a hole in a screen</p> <p><u>3.4</u> Hang a window shade Hem a window shade Adjust a window shade Decorate a window shade</p>	
<p><u>4.1</u> Cement and plaster work - a basic understanding</p>	<p><u>4.</u> To recognize some types of material used in construction and how to repair it.</p>		

Unit IV. Continued.

Topics	Objectives	Learning Activities	Resources
<p><u>4.2</u> Plaster: composition of plaster patching plaster</p>		<p><u>4.2</u> Patch a plaster crack. Patch a plaster hole.</p>	
<p><u>4.3</u> Tile: kind of tile methods of installation of tile</p>		<p><u>4.3</u> Set tile. Make hot plates. Re-grout</p>	
<p><u>4.4</u> Waterproofing: types of seepage holes types of waterproofing application of water-proofing Caulking materials and types.</p>		<p><u>4.4</u> Waterproof a basement wall.</p>	
<p><u>4.5</u> Concrete work: type of concrete mix ready-mixed concrete how to mix concrete curing concrete reinforced concrete finishing poured concrete</p>		<p><u>4.5</u> Repair concrete sidewalk. Make stepping stones.</p>	
<p><u>4.6</u> Brick work composition of mortar laying brick finishing joints</p>		<p><u>4.6</u> Repair a chimney. Build a bar-b-que.</p>	
<p><u>4.7</u> Brick walks and terraces preparation of footing procedure for laying bricks</p>		<p><u>4.7</u> Build an outside walkway and/or fireplace.</p>	

Unit IV. Continued.

Topics	Objectives	Learning Activities	Resources
<p><u>5.1</u> The various utilities (function and use)</p> <p>electricity gas water oil sewage air conditioning and purification</p>	<p><u>5.1</u> To understand how various utilities function in the home and gain an appreciation of their role in making a home liveable.</p>	<p><u>5.1</u> Discuss the role of each and their importance and interrelationship.</p>	
<p><u>5.2</u> Electricity: a basic understanding.</p> <p>service drop 3 wire service service entrance wathour meter load center circuit breakers branch circuits general purpose appliance circuits individual circuits wiring devices switch boxes junction boxes wire connectors appliance grounding symptoms of inadequate wiring undesirable conditions wastes electricity creates fire hazard</p>	<p><u>5.2</u> To bring to the student's attention the kind of circuits used in his home, and gain an appreciation for safety in the use of electricity.</p>	<p><u>5.2</u> Students trace the wiring system in their home. Make a chart of what is on each circuit and post it near the fuse box.</p> <p>Discuss what would happen if a circuit was severely overloaded.</p> <p>Visit power facility (dam, substation, etc.)</p>	<p><u>5.2 Understanding Electricity and Electronics</u> Bubon & Schmitt</p>

Unit IV. Continued.

Topics	Objectives	Learning Activities	Resources
<p>improper operation of appliances noticeable symptoms: fuses blow often heating appliances do not heat quickly lights dim when appliances are used TV picture shrinks when appliances are used Motors start with difficulty Motors overheat Fuse safety rules: proper size & kind things to do before replacing how to replace care in replacing</p>		<p>Demonstrate how to change a fuse or reset a circuit breaker.</p> <p>Read an electric meter.</p>	
<p><u>5.3</u> Electricity as light in the home.</p>		<p><u>5.3</u> Polly Pacific talk and demonstration on proper lighting.</p>	<p><u>5.3</u> <u>How to Light Your Home for Comfort and Beauty.</u> <u>Planning Your Home Lighting</u></p>
<p><u>5.4</u> Electricity as a source of heat in the home.</p>			<p><u>5.4</u> <u>Electric Heating Systems</u> <u>The Joy of Total Electric Living</u></p>
<p><u>5.5</u> Water: a basic understanding: arrangement of house plumbing care of porcelain plumbing fixtures care and repair of the garden hose</p>	<p><u>5.5</u> To appreciate water as an important resource.</p>	<p><u>5.5</u> Assemble threaded pipe fittings Temporary repair of leaking pipe Repair leaking garden hose Replace faucet washer</p>	<p><u>5.5</u> <u>Guide to Modern Water Service</u> <u>Planning Bathrooms for Today's Homes</u> <u>Simple Plumbing Repairs for the Home and Farmstead</u></p>

Unit IV. Continued.

Topics	Objectives	Learning Activities	Resources
types of faucets and valves thaw out frozen pipes how to keep from freezing vapor barriers		Replace faucet valve Clean shower head Silence noisy pipes Thaw out frozen water pipe Discuss safety in all cases.	
<u>5.6</u> Sewage: drain a plumbing system common flush tank difficulties waste disposal system septic tank care of drains cleaning traps and sewer lines use of solvents, plunger and plumber's snake	<u>5.6</u> To appreciate the convenience of a sewage system.	<u>5.6</u> Repair flush tools Clean clogged drain trap or sewer line	
<u>5.7</u> Gas and Oil: method of repairing leaks in hot water tank pipe insulating - types of covering firing hand-fed furnaces lighting an oil burner care and maintenance of a gas furnace - operation properly adjusted flame cleaning burner gas leaks procedure of lighting a gas furnace	<u>5.7</u> To appreciate the role gas and oil play in the home and how they function.	<u>5.7</u> Clean out hot water tanks Plug a leak in a tank Insulate a water pipe Maintain a furnace: clean heater unit clean and check smoke pipe check insulated furnace joints check automatic valves Clean and adjust stov and air units Clean and adjust a gas stove	<u>5.7</u> <u>The Air Around Us</u> (film) <u>Art and Science of Oil Burning for Residential Application</u> <u>Coal</u> <u>Total Comfort</u> <u>Holiday Gas Boilers</u>

Unit IV. Continued.

Topics	Objectives	Learning Activities	Resources
5.8 Method of computing cost of gas and water		5.8 Read a gas meter Read a water meter	

Unit IV - References

1. 1 Books and Pamphlets: The High Cost of Cheap Construction. Weyerhaeuser Co. , Box B, Tacoma, Wash. 98401.
- Wood - Colors and Kinds. 75¢. Consumer Production Information, Washington, D. C. 20407.
- Films: "From Trees to Lumber." 14 min. American Forest Products Industries, Inc. , 1816 N. St. NW, Washington, D. C. 20036.
1. 4 Books and Pamphlets: Guide to Better House Painting. The Glidden Co. , 900 Union Commerce Bldg. , Cleveland, Ohio.
- How to Paint the Outside of Your Home. Benjamin Moore and Co. , 548 Fifth Ave. , New York, N. Y. 10016.
- Exterior Painting. 10¢. Consumer Product Information, Washington, D. C. 20407.
- Interior Painting. 10¢ Consumer Product Information, Washington , D. C. 20407.
1. 6 Books and Pamphlets: Barclay. Barclay Manufacturing Co. , Inc. , 770 Lexington Ave. , New York, N. Y. 10021.
- Weldwood. U. S. Plywood-Champion Papers, Inc. 777 Third Ave. New York, N. Y. 10017.
- Wonderful World of Hardwoods. Film. 13 min. Color. Hardwood Plywood Manufacturers Assn. and Fine Hardwoods Assn. Modern Talking Picture Service, 1212 Avenue of the Americas, New York, N. Y. 10036.
- Wood Siding, How to Install It, Paint It, Care for It. 15¢. Consumer Product Information, Washington, D. C. 20407.
1. 9 Books and Pamphlets: Oak Floors, A Home Owner's Guide. National Oak Flooring Manufacturers' Assn. , 814 Sterick Bldg. , Memphis, Tenn. 38103.
2. 1 Books and Pamphlets: How to Buy a Good Window. Anderson Corp. , Bayport, Minn. 55003.
- Introducing Anderson Perma-Shield Windows and Gliding Doors! Anderson Corp. , Bayport, Minn. 55003.
- Reuten Tru-Wall Wood Casement Windows. Fred Reuten, Inc. , Closter, N. J.

Window Information. R. O. W. Window Sales Co. , 1365 Academy Ave. , Ferndale, Mich. 48220.

5.3 Books and Pamphlets: How to Light Your Home For Comfort and Beauty. Lightolier, 346 Claremont Ave. , Jersey City, N. J. 07035.

5.4 Books and Pamphlets: Electric Heating Systems. Edison Electric Institute, 750 Third Ave. , New York, N. Y. 10017.

The Joy of Total Electric Living. Edison Electric Institute, 750 Third Ave. , New York, N. Y. 10017.

5.6 Books and Pamphlets: Guide to Modern Water Service. Goulds Pumps, Inc. , 240 Fall St. , Seneca Falls, N. Y. 13148.

Planning Bathrooms for Today's House. 15¢ Consumer Product Information, Washington, D. C. 20407.

Simple Plumbing Repairs for the Home and Farmstead. 10¢. Consumer Product Information, Washington, D. C. 20407.

5.8 Books and Pamphlets: Art and Science of Oil. \$2.00. American Petroleum Institute, 1271 Avenue of the Americas, New York, N. Y. 10020.

Coal. National Coal Assn. , Coal Bldg, 1130 Seventeenth St. , N. W. , Washington, D. C. 20036.

Total Comfort. Lennox Industries, Inc. , 567 South 12th Ave. , Marshalltown, Iowa.

Holiday Gas Boilers. Burnham Corp. , Irvington, New York.

How to Choose the Right Heating System for Your Home. Consumer Products Division, A. O. Smith Corp. , Kankakee, Illinois.

Films: The Air Around Us. 26 min. color. Produced by Carrier Corp. Sterling Movies, Inc. , 43 West 61 St. , New York, N. Y. 10023.

UNIT V

To develop an awareness of the basic principles of design in the home.

Topics	Objectives	Learning Activities	Resources
<p><u>1.1</u> Interior design is the organization of space and equipment for pleasant living.</p> <p><u>1.2</u> Home furnishings must be useful, easy to maintain, and purchase price within the family budget.</p>	<p><u>1.1</u> To gain some judgment in arranging furnishings for efficiency, convenience and beauty.</p> <p><u>1.2</u> To get the maximum use and enjoyability from the home.</p>	<p><u>1.2</u> Selecting furnishing: labor saving equipment: floor coverings: styles that may be used together periods of furniture household textiles accessories draperies curtains</p> <p>Use a catalog to pick out furniture which a family must have and determine the smallest amount of money needed to furnish a home.</p> <p>Discuss reasons for using rugs, curtains, and accessories.</p> <p>Visit an upholsterer and ask him to show how furniture is made and which is best.</p>	<p><u>1.2</u> Parvis, <u>Furnishing Your Home</u> Gillespie, <u>Home Furnishings</u> Morton, <u>The Home: Its Furnishings and Equipment</u>. Heuer, <u>Your Home Furnishing Dollar</u> Films: <u>The Home that Jenny Built</u>.</p>

Unit V. Continued.

Topics	Objectives	Learning Activities	Resources
		<p>Show pictures which demonstrate effect of color on room size. Do the same for designs.</p> <p>Using transparencies or floor plans on poster board, have the students study as many ways as possible to place the pieces. Make a list of questions to use in checking each placement. Examples: Is there enough light near the chairs? Where will a person walk when he comes in, crosses or goes out? Is this the best way to arrange the room for the way it is used? Is it attractive?</p>	
<p><u>2.1</u> Knowledge of the art principles is a help in decorating an appealing and interesting home.</p> <p><u>2.2</u> The plastic elements: form, line, light, color, texture, and space.</p>		<p><u>2.1</u> Study art principles, as balance, rhythm, proportion, repetition, color harmonies. Select from magazines pictures of rooms showing these principles. Practice with color by studying color wheels, mixing colors.</p> <p><u>2.2</u> Visit homes - note use of art principles. Talk from an interior decorator - study and select.</p> <p>Make a designer's sketch of a <u>room flat</u> view with proportioned cards for furniture and color background.</p>	<p><u>2.1</u> <u>Color in Everyday Living</u> <u>Basic Color</u> - J. C. Penny Interior Decorating Kit <u>The Elements of Art</u> <u>Series - super 8.</u></p>

Unit V. Continued.

Topics	Objectives	Learning Activities	Resources
		<p>Choose pictures from magazines showing things family members do in all parts of the house. Discuss the kinds of furniture needed and the amount of space.</p> <p>Discuss need for a place to be alone.</p>	
<p><u>3.1</u> Good home furnishings and planning has four goals: use, economy, beauty and individuality.</p> <p><u>3.2</u> Good taste in selection of furniture and accessories is simplified by remembering the rule: "Form follows function."</p>	<p><u>3.1</u> To realize that cost is both original and continuing, and that the first cost must be balanced with the total maintenance and upkeep cost over the expected life of the object.</p> <p><u>3.2</u> To be aware that standards and individual tastes are constantly changing and developing as experiences broaden.</p>	<p><u>3.1</u> Discuss: Is sterling silver, Lenox china and cut glass necessary for today's living? Work art color schemes in paper and textiles for rooms as monochromatic, complimentary, analogous etc.</p> <p><u>3.2</u> Visit furniture stores - note quality, costs, construction of furniture and floor coverings.</p>	<p><u>3.2</u> Johnson Wax Pamphlets</p>
<p><u>4.1</u> Well-chosen accessories are beautiful and meaningful to you and contribute to your home.</p>	<p><u>4.1</u> To recognize and respect the inherent qualities of various materials.</p> <p>To realize that esthetic qualities are an inherent part of craftsmanship.</p> <p>To understand function and beauty.</p>	<p><u>4.1</u> Have students identify several areas in their homes and make appropriate accessories, such as:</p> <ul style="list-style-type: none"> pillows wall hangings candles candle holders pictures sewing projects IA projects 	<p><u>4.1</u> Films:</p> <ul style="list-style-type: none"> Art from Scrap - OSU Arranging Flowers in Your Home - OSU <p><u>Decorative Treasure from Papier-Mache</u></p> <p>Books from American Handicraft.</p> <p>Craft books.</p>

Unit V. Continued.

Topics	Objectives	Learning Activities	Resources
<p><u>4.2</u> Low cost decorating.</p>	<p>Some ability to make a home liveable.</p> <p>Ability to rejuvenate, adapt and construct home furnishings and accessories.</p>		

Unit V - References

1. 2 Books: Gillespie, Ruth. Home Furnishings. Bennett. 1970.

Heuer, Leone. Your Home Furnishing Dollar. Household Finance Co. 1969.

Morton, Ruth. The Home: Its Furnishings and Equipment. McGraw-Hill. 1970.

Parvis, Austin. Furnishing Your Home. Bennett. 1970.

Films: The Home that Jenny Built. 20 min. Color. OSU.

2. 2 Books: Color in Everyday Living.

J. C. Penney. Basic Color. Local J. C. Penney Store.

Films: The Elements of Art Series. Super 8 film loops, BFA Education Media.

4. 1 Books and Pamphlets: American Handicrafts. Decorative Treasure from Papier-Mache. American Handicraft Outlets in Eugene and

Films: Art from Scrap. 5 min. Color. \$4. 50. OSU.

Arranging Flowers in Your Home. 25 min. Color. \$8. 00. OSU.

UNIT VI

To develop the ability to use and care for home equipment and appliances properly.

Topics	Objectives	Learning Activities	Resources
<p><u>1.1</u> Homemaking tasks are facilitated by equipment appropriate for the individual or family and installed or stored for maximum convenience.</p>	<p><u>1.1</u> To understand factors influencing the choice of equipment for the home.</p>	<p><u>1.1</u> List and discuss factors which influence one's choice of equipment for the home.</p>	
<p><u>1.2</u> Plastic materials - thermoplastics thermosetting</p>	<p><u>1.2</u> To acquaint the student with the groups and many types of plastic in the home.</p>		
<p><u>1.3</u> Forming plastic: injection compression transfer blow forming extrusion calendering slush molding basic casting thermoforming</p>		<p><u>1.3</u> Make some items from plastic which could be used in the home.</p>	
<p><u>1.4</u> Some uses of plastic: ABS plastics - pipes, wheels, helmets Acetal resins - gears, carburetor parts, door handles Acrylics - costume jewelry, taillights</p>		<p><u>1.4</u> Some examples. Have students identify as many as possible which are around them in everyday life.</p>	

Unit VI. Continued.

Topics	Objectives	Learning Activities	Resources
Alkyds - switches Allyics - appliance handles Melamine and Urea - tableware, buttons Casein - toys, adhesives Cellulosics - containers, insulators Epoxy - adhesives, protective coverings Flurocarbons - valve seats, gaskets Nylon - tumblers, faucet washers, brush bristles Phenolics - radio-TV cabinets Polycarbonate - business machines Polyesters - sky lights, luggage Polyethylene - rain capes, freezer bags Polystrene or styrene - kitchen items Silicons - coil forms, switch parts Urethones - cushioning, mattresses Vinyls - garment bags, water toys, garden hoses, furniture cover- ings		Kitchen game to identify equip- ment. Or a treasure hunt.	
2.1 Metal materials: ferrous metal steel nonferrous metal aluminum copper	2.1 To acquaint the student with the properties and characteristics of the more common metals used in the home.	2.1 Discuss and show examples.	2.1 <u>Art Metal Series</u> <u>Metalworking Series</u> <u>Metalworking Tools Series</u>

Unit VI. Continued.

Topics	Objective	Learning Activities	Resources
<p>zinc brass bronze</p> <p><u>2.2</u> Properties: hardness malleability elasticity ductility fatigue resistance corrosive resistance</p> <p><u>2.3</u> Characteristics: color carbon content standard shapes</p> <p><u>2.4</u> Metal fasteners: cold metal fasteners - rivets screws - machine sheet metal drill size for tapping soldering spot welding</p> <p><u>2.5</u> Forging and casting: tools processes - forging forging jobs</p>	<p><u>2.4</u> To familiarize the student in the various fastening materials, tools, techniques, and fundamentals that are involved.</p> <p><u>2.5</u> To provide learning experiences in which the student will learn basic reactions of metal when it is heated and shaped or heated and poured.</p>	<p><u>2.3</u> Demonstrate. Discuss selection of home "utensils" and the type of metal best suited.</p> <p><u>2.4</u> Students make something using metal and at least one method to "fasten" it. (EX: cooky cutters, candle molds, etc.)</p> <p>Use the items made and discuss their qualities. Compare to commercially manufactured.</p> <p><u>2.5</u> Students make something in the foundry such as trivets, decorative items, etc.</p>	

Unit VI. Continued.

Topics	Objectives	Learning Activities	Resources
<p>foundry tools, types of casting, casting processes</p> <p><u>2.6</u> Metal finishing: types of finish transparent opaque decorative preparation of surface cleaning metal preventing oxidation finishing metal</p> <p><u>2.7</u> Heat treatment of metal: annealing purpose technique hardening purpose technique tempering purpose technique</p>	<p><u>2.6</u> To make students aware of the various methods of finishing metal and to enable him to see by self application the results of properly finished metal.</p> <p><u>2.7</u> To make the student aware of the variety of heating and cooling operations by which the characteristics of metal are changed.</p>	<p><u>2.6</u> Students do a project which involves the use of a metal different than what they have used before and apply some type of finish.</p> <p><u>2.7</u> Demonstrate and discuss the importance of heat treatment of items in the home.</p>	
<p><u>3.1</u> Large appliances (gas and electric): range refrigerator freezer</p>	<p><u>3.1</u> To understand how appliances function and that their upkeep is of major importance.</p>	<p><u>3.1</u> Discussion and display: use, care, repair, purchase and safety.</p>	<p><u>3.1</u> Appliance booklets Speakers from appliance or utility companies.</p>

Unit VI. Continued.

Topics	Objectives	Learning Abilities	Resources
<p>washer dryer shop power equipment</p> <p><u>3.2</u> Gain some familiarity with the large appliances in the departments by using them:</p> <p>*Introduction to Foods *Introduction to Laundry</p> <p><u>3.3</u> Cleaning supplies: equipment products</p>			<p><u>Electric Cooking the Flameless Way Use and Care Instructions</u> <u>Gas and Electric Ranges</u> <u>A Guide to Buying Information on Home Appliances</u></p>
<p><u>4.1</u> Small appliances: toaster electric fry pan broiler vacuum cleaner sewing machine saws drill</p> <p><u>4.2</u> Gain some familiarity with the small appliances in the department by using them:</p> <p>*Mini meals or snacks *Introduction to sewing</p>	<p><u>4.1</u> Understanding the ways small appliances work helps to operate them properly and to keep them operating.</p>	<p><u>4.1</u> Discussion and display: use, care, repair, purchase and safety.</p>	<p><u>4.1</u> Appliance booklets</p> <p><u>Cooking Ideas with Portable Electric Appliances</u> <u>Electric Portable Appliances</u> <u>What Appliances Won't Do</u></p>

Unit VI. Continued.

Topics	Objectives	Learning Abilities	Resources
<p><u>5.1</u> Household repairs and maintenance bills can be greatly reduced if manufacturer's instruction booklets are read and adhered to.</p>			
<p><u>5.2</u> Simple repairs: wire splicing preparation of wire soldering and taping splices</p>	<p><u>5.2</u> To understand how to make simple household repairs and in so doing cut the cost and frustration of repair bills.</p>	<p><u>5.2</u> Make a pigtail splice Solder an electrical splice Make a branch top splice</p>	
<p><u>5.3</u> Repair of electrical cords: staggered splices separating a socket types of sockets and plugs</p>		<p><u>5.3</u> Splice an appliance cord Replace a socket Replace male and female plugs</p>	
<p><u>5.4</u> Electric heating appliances: principle of heating appliance care of heating appliance repair of heating appliance</p>		<p><u>5.4</u> Replace element in an iron or toaster.</p>	
<p><u>5.5</u> Motor maintenance: proper use of a motor oiling a motor cleaning a motor</p>		<p><u>5.5</u> clean and oil a motor</p>	
<p><u>5.6</u> Radio: precautions in making repairs</p>		<p><u>5.6</u> Clean a radio Replace radio dial string Replace radio tube</p>	

Unit VI - References

2. 1 Films: Art Metal Series. Super 8 Film Loop. BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404.
- Metal Working Series. Super 8 Film Loop. BFA Educational Media.
- Metal Working Tools Series. Super 8 Film Loop. BFA Educational Media.
3. 1 Books and Pamphlets: Electric Cooking the Flameless Way. Utility companies.
- Use and Care Instructions. Admiral Corporation, 3800 Cortland St. , Chicago, Ill. 60647.
- Gas and Electric Ranges. Association of Home Appliance Manufacturers, 20 W. Wacker Dr. Chicago, Ill. 60606.
- A Guide to Buying Information on Home Appliances. Association of Home Appliance Manufacturers.
4. 1 Books and Pamphlets: Cooking Ideas with Portable Electric Appliances. Utility companies.
- Electric Portable Appliances. General Electric Co. , Housewares Division, Bridgeport, Conn. 06602.
- "What Appliances Won't Do - Cautions on Purchase, Use and Care." What's New in Home Economics, May-June, 1970.

UNIT VII

To understand that proper care of furnishings help to maintain their beauty and length of service.

Topics	Objectives	Learning Activities	Resources
<p><u>1.1</u> Types of wood and their characteristics. (Include use of imitation wood surfaces).</p>	<p><u>1.1</u> To appreciate that proper care of wooden surfaces helps to maintain their appearance and length of service.</p>	<p><u>1.1</u> Identify several types of wood used in furniture.</p>	<p><u>1.1</u> B. B. B. , <u>The Careful Art of Buying Furniture</u> Drexel, <u>Drexel Furniture</u> Woman's Day, <u>Fine Furniture</u> Fine Hardwoods, <u>Fine Hardwoods</u> <u>Make Fine Furniture</u> Good Housekeeping, <u>Furniture Chart</u> Kroehler, <u>Furniture Information</u> Nichols & Stone, <u>How to Choose the Colonial Chair</u> Sears, Roebuck & Co. , <u>How to Select Furniture</u></p> <p>California Redwood Assn. , <u>Outdoor Furniture</u> California Redwood Assn. , <u>Redwood Interiors</u> Seng Co. , <u>Seng Furniture Facts</u></p> <p>Broyhill Furniture Factories, <u>What Every Girl Should Know About Furniture Buying</u></p>
<p><u>1.2</u> Proper care and maintenance of wooden furniture (includes finishes).</p>		<p><u>1.2</u> Students demonstrate caring for and maintaining a piece of furniture.</p>	

Unit VII. Continued.

Topics	Objectives	Learning Abilities	Resources
<p><u>1.3</u> Quality of furniture is determined by quality of the materials and by the quality of workmanship.</p> <p><u>1.4</u> Minor repairs for wooden furniture - finishes and broken parts.</p>		<p><u>1.3</u> Field trip to local furniture store. Find out different styles and quality of furniture and evaluate each.</p> <p><u>1.4</u> Students repair a piece of furniture.</p>	<p><u>1.4</u> Films: BFA, <u>Wood Working Machine Operations</u> BFA, <u>Woodworking Tools</u>.</p>
<p><u>2.1</u> Types of floor coverings</p>	<p><u>2.1</u> To appreciate that there is more than one type of floor covering and the care is essential to its longevity.</p>	<p><u>2.1</u> Show examples of hardwood floors: linoleum; tile; carpets; rugs.</p>	<p><u>2.1</u> Conogoleum-Nairn, Inc. , <u>Advice About Floors</u> American Biltrite Rubber Co. , <u>Amitico Vinyl Flooring</u> Rubber Manu. Co. , <u>Approved Maintenance Methods for Solid Vinyl and Rubber Floors</u> American Cynamid, <u>Ban-H-Room Guide to Selecting Carpets</u> Robbins Products, Inc. , <u>Beauty and Imagination and Rubber Flooring</u> Good Housekeeping, <u>Buying Carpets</u> Conogoleum-Nairn, Inc. , <u>Cushion Your Floors</u> Bigelow-Sanford, Inc. , <u>Fashions for Floors</u> Bissell, Inc. , <u>Four Steps to Carpet Beauty</u></p>

Unit VII. Continued.

Topics	Objectives	Learning Activities	Resources
<p><u>2.2</u> Proper care and maintenance of wooden floors</p> <p><u>2.3</u> Proper care and maintenance of linoleum and tile floors</p>		<p><u>2.2</u> Discuss and show how to care for and repair a wooden floor.</p> <p><u>2.3</u> Demonstrate the care and discuss the maintenance. Have the students use the various cleaning equipment and supplies available and do areas of a floor.</p>	<p>Monsanto Co. , <u>How to Care for Your Carpet</u></p> <p>Uvalde Kock Asphalt Co. , <u>How to Care for Your Fine Floors</u></p> <p>Sears, Roebuck, <u>How to Select Floor Covering</u></p> <p>Bissell Inc. , <u>The Inside Story of Rug and Carpet Care</u></p> <p>Monsanto Co. , <u>Know Your Nylon Carpets</u></p> <p>Dupont, <u>Let's Talk About Carpets</u></p> <p>B. B. B. , <u>Rugs and Carpeting</u></p> <p>Monarch Carpet Mills, <u>What You Should Know About Carpets</u></p> <p>Wood Carpets of America, <u>When Shopping for a Carpet</u></p> <p>Ruberoid Co. , <u>Why Ruberoid Em- bossed Floor Tile is Easy to Maintain</u></p>

Unit VII. Continued.

Topics	Objectives	Learning Activities	Resources
<p><u>4.1</u> Types of furniture</p> <p>Price is not an indication of quality.</p> <p>Style of furniture influences the price.</p> <p><u>4.2</u> Repairing upholstered furniture.</p>		<p><u>4.1</u> Show various periods of furniture.</p> <p>Discuss quality. Compare by example.</p> <p>Discuss styles of furnishings and what is appropriate together. Select pictures from magazines and make attractive arrangements.</p> <p><u>4.2</u> Repair small rips or tears or missing tacks.</p>	<p><u>4.1</u> transparencies</p> <p><u>4.2</u> Dupont, <u>Before you Buy . . .</u></p> <p>Film: <u>From Fiber to Fabric</u></p>
<p><u>5.1</u> Making and/or renovating furniture.</p>		<p><u>5.1</u> If time permits, students could reupholster furniture or could make some simple repairs. They could also make some simple furniture such as stools with a wooden frame and upholstered seat, or bean bag chairs, etc.</p>	

1. 1 Books and Pamphlets: The Careful Art of Buying Furniture. Better Business Bureau.
What Every Girl Should Know About Furniture Buying. Broyhill Furniture Factories, Lenoir, N. C.
Outdoor Furniture. 10¢. California Redwood Assn. , 617 Montgomery St. , San Francisco, California 94111.
Redwood Interiors. 10¢. California Redwood Assn. , 617 Montgomery St. , San Francisco, California 94111.
Drexel Furniture. Drexel Furniture Co. , Drexel, N. C. 28619.
Fine Hardwoods Make Fine Furniture. Fine Hardwoods Assn. , 666 Lake Shore Dr. , Chicago, Ill. , 60611.
Furniture Chart. 35 ¢. Good Housekeeping Bulletin Service, 47th Street at Eighth Ave. , New York 10019.
Furniture Information. \$5.00. Consumer Education Division, Kroehler Manufacturing Co. , Naperville, Ill.
How to Choose the Right Colonial Chair. 25¢. Nichols & Stone Co. , Gardner, Mass.
How to Select Furniture. Consumer Information Division, Sears, Roebuck and Co. , 3301 West Arthington St. , Chicago, Ill. 60607.
Seng Furniture Facts. \$1.00. The Seng Co. , 1450 North Dayton St. , Chicago, Ill. 60622.
Fine Furniture. \$1.00. Woman's Day. 67 West 44th St. , New York 10036.
1. 4 Films: Woodworking Machine Operations Series. Super 8 Film Loop. BFA Educational Media.
Woodworking Tolls Series. Super 8 Film Loop. BFA Educational Media.
2. 1 Books and Pamphlets: Amitico Vinyl Flooring. American Biltrite Rubber Co. , Inc. , Trenton, New Jersey 08607.
Ban-A-Room Guide to Selecting Carpets. Fibers Division, American Cynamid, 11 West 40th St. , New York, N. Y. 10036.
Rugs and Carpeting. Better Business Bureau.
Fashions for Floors. Bigelow-Sanford, Inc. , 140 Madison Ave. , New York 10016.
Four Steps to Carpet Beauty. \$1.50. Bissell Inc. , Grand Rapids, Mich. 49501.
The Inside Story of Rug and Carpet Care. Bissell Inc. , Grand Rapids, Mich. 49501.
Advice About Floors. Conogoleum-Nairn, Inc. , 95 Belgrave Dr. , Kearney, New Jersey.
Cushion Your Floors. Consumer Service Department, Conogoleum-Nairn, Inc. , 18th St. , at Allegheny, Philadelphia, Pa. 10132.
Let's Talk About Carpets. Product Information Section, Textile Fibers Dept. , E. I. Dupont de Nemours and Co. , Inc. , Wilmington, Del. 19798.
Buying Carpets. Goodhousekeeping Bulletin Service. 47th St. at Eighth Ave. , New York 10019.
What You Should Know About Carpets. 50¢. Monarch Carpet Mills, Chamblee, Ga.
How to Care for Your Carpet. Textiles Division, Monsanto Co. , 350 Fifth Avenue, New York 10001.
Know Your Nylon Carpets. Textiles Division, Monsanto Co. , 350 Fifth Avenue, New York 10001.
Beauty and Imagination and Rubber Flooring. Robbins Products, Inc. , Tuscumbia, Ala.

Approved Maintenance Methods for Solid Vinyl and Rubber Floors. Vinyl and Rubber Flooring Division, Rubber Manufacturing Assn., 444 Madison Ave., New York 10029.

Why Ruberoid Embossed Floor Tile is Easy to Maintain. The Rubberoid Co., 733 Third Ave., New York 10017.

How to Select Floor Covering. Consumer Information Division. Sear, Roebuck and Co., 3301 West Arthington St., Chicago, Ill. 60607.

How to Care for Your Fine Floors. Azrock Floor Products, Uvalde Rock Asphalt Co., 500 Frost Bldg., San Antonio, Texas 78206.

When Shopping for Carpet. Wool Carpets of America, 360 Lexington Ave., New York 10017.

- 4.2 Books and Pamphlets: Before You Buy . . . What You Should Know About Upholstery Fabrics. Textile Fibers Dept., E. I. Dupont de Nemours and Co., Inc., Wilmington, Del. 19798.

Films: From Fiber to Fabric. Pittsburg Plate Glass Co., Modern Talking Picture Service, 1212 Avenue of the Americas, New York 10016.
(slides)