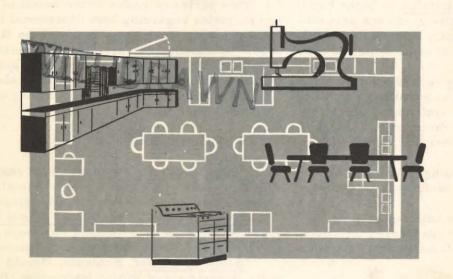
SCHOOL BUILDING PLANNING SERIES

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A GUIDE FOR PLANNING SPECIALIZED DEPARTMENTS FOR HIGH SCHOOLS IN IOWA





Bulletin 127-1

Engineering Extension Iowa State College Ämes, Iowa

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One of the major tasks of local boards of education is that of providing adequate housing for rapidly increasing school enrollments. Those responsible for school planning must be informed on trends in education and their implications for the future, and must use all help available in securing the most efficient plant in the light of community needs.

The American Association of School Administrators in their 27th year-book suggests the following:

Curriculum Adequacy - Does the building provide the space and facilities for the educational program needed by the children, youth, and adults of the community?

Safety and Well-being - Does the building provide a positive influence for improving the health and physical welfare of the pupils?

Interfunctional Coordination - Is the building so planned that the activity in each part may be coordinated harmoniously with related activities, without disturbing other activities of the school program?

Efficiency and Utility - Is the building so planned that the handling of materials and the passing of pupils, school staff, and the public are accomplished with a minimum of interference and a maximum of ease and satisfaction to all concerned?

Beauty - Is the building pleasing in appearance with simplicity and usefulness as the major American Association of School Administrators, objective?

Adaptability — Is the building so planned that it can be enlarged or rearranged internally to meet new educational demands at a minimum cost?

Economy - Is the building so planned that in original outlay and future operation the utmost in educational utility can be secured for every dollar spent?

The local board of education is the basic policy-making body for planning and promoting educational programs and buildings. The superintendent, as a trained educator, is the chief executive officer for the board, and assists by preparing recommendations based on careful research. The teachers, as the personnel closest to the pupils, can provide valuable recommendations based on training and experience. The architect, using the ideas of the board, superintendent, and teachers, provides the professional planning which results in a satisfactory and economical building.

This series of guides is the result of numerous inquiries regarding both educational and technical planning which have come to Iowa State College. Educational and architectural specialists have helped in the preparation of each publication of the series. It is hoped that these guides will provide a sound basis for local planning of specialized departments.

SUGGESTED REFERENCES:

American School Buildings, 27th year-book, National Education Association, Washington, D.C.

Planning Together for Better School Buildings, Michigan School Building Handbook, State Department of Public Instruction, Lansing, Mich.

Before You Build, Boicourt, Gerald W., State Department of Public Instruction, Des Moines, Iowa. 1953.

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Project Approved by School Planning Committee, Iowa Chapter, American Institute of Architects, and the Iowa State Department of Public Instruction.

SCHOOL BUILDING PLANNING SERIES

PART I

A GUIDE FOR PLANNING

HOMEMAKING DEPARTMENTS

IN IOWA

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FOREWORD

This bulletin brings in condensed form current philosophy and information that are basic to planning homemaking departments for Iowa schools. It is designed to help in interpreting needs and specifications for an effective homemaking program that provides varied experiences. No two communities will have exactly the same problems in planning.

The current high cost of building and equipping necessitates very careful planning for economical and yet satisfactory facilities. The increasing High School enrollment must also be kept in mind. The developing home economics program presents somewhat different needs but not necessarily more spacious or costly ones. This points up the great importance of calling upon the homemaking teacher and the State supervisors of homemaking in the State Department of Public Instruction for constructive help in the planning of homemaking departments in Iowa.

With this assistance, the architect can solve the physical needs of the school within budget limitations.

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INTRODUCTION

BASIC PHILOSOPHY

"The over-all objective of homemaking education is the improvement of home, family, and community living through training of youth and adults."1 Values of wholesome family living are increasingly stressed. The curriculum, therefore, is built around the activities which are an integral part of the various patterns of American improvements. "The equipment and furnishings family life today.

An adequately equipped homemaking department contributes to the accomplishment of this objective in a sound program:

When it appeals to students in all socio-economic levels. Adolescents go where they enjoy the surroundings and the people with whom they associate.

When it creates something of the atmosphere of a real home with simplicity, convenience, comfort, and attractiveness as its keynote. living, space, and equipment will be needed for

When it provides space, furnishings, and equipment to teach all aspects of the program. The teacher's energy can be more advantageously used for counseling pupils, helping with adult homemaking problems in the community, interpreting the vocational homemaking program and other services for which the physical plant cannot provide.

When it provides opportunity for a variety of nishings and equipment. learning experiences to reach desired goals. The design of the department can either facilitate or inhibit the use of a variety of teaching methods.

When it is efficient and easy to keep orderly and clean. Good equipment makes it easier to do good housekeeping.

When it is designed and equipped in such a way that students have an opportunity to develop good habits and acceptable standards of work.

When it exemplifies a standard of furnishings and equipment attainable by people in the community for whose use the department is designed.

When it can be used as teaching material as well as a place to teach. To do this, variety and flexibility must be incorporated into the design.

When it is so furnished, equipped, and decorated that students have an opportunity to appreciate quality and beauty in their surroundings.

When the space is so designed that it can be adapted to changes in enrollment and in organization, content, and teaching of the program.

When it appeals to teachers; for this is one of the important factors which influence the teacher's satisfaction with her job.

BASES FOR DECIDING UPON SPACE AND EQUIPMENT

A homelike, attractive, colorful and well equipped department provides the setting for a good homemaking program. In addition, the facilities of the department can serve to set standards that are desirable for homemakers in the community and to stimulate them to make needed of the department provide opportunity for experimentation with a variety of qualities and types of materials. Variety in construction and finishes provides a basis for pupils and for others in the community to develop judgment in making selections for their own homes."2

When planning a homemaking department, a particular community will need to consider: The Program To Be Offered

For adequate instruction in effective home these areas:

Selection, preparation, serving, conservation, and storage of food for the family.

Selection, care, renovation, and construction of clothing.

Achievement and maintenance of a satisfactory appearance.

Selection and care of the house and its fur-

Care and guidance of children.

Home care of the sick and first aid.

Management and maintenance of health and home safety.

Selection and provision of educational and recreational experiences for family members. Standards that Are Desirable and Attainable in the Community

The kinds of equipment and furnishings selected should be desirable and attainable for the majority of the families in the community. Size of Classes

The department needs to be planned to serve the anticipated number of pupils in a class. In Iowa, most homemaking classes range from 16 to 24. The probable high school enrollment in the future is one guide for determining the number of classes and teachers for which space and equipment will be needed.

WHO PARTICIPATES IN PLANNING?

Planning a homemaking department is a cooperative project. Those who are directly concerned and will have ideas to contribute to the architect are the homemaking teacher, school

administrators, members of the board of educa- that are located in schools similar to theirs. tion, key community members, and the state supervisors of homemaking. School architects want and need the ideas and cooperation of these teaching homemaking and explains the space, people and will welcome a local situation in which the way is paved for working with them.

The superintendent will be able to recommend location of the department in relation to other departments in the school, estimate the number of and approximate size of classes in the future, estimate the amount of space that might be allotted to the department and probable amount of money available.

The local school board and superintendent will work closely with the homemaking teacher throughout the planning and building process. It is very helpful for this group to visit recently built or remodeled homemaking departments

The homemaking teacher interprets trends in equipment, and storage needed to teach each phase of the homemaking program. She also recommends color, finishes, and decorative treatments which will make the department homelike and attractive.

The state supervisors of homemaking education are available for consultation in planning homemaking departments.

In a school approved for vocational homemaking, or in'one interested in a vocational program, the general plan for remodeling or equipping a homemaking department should be approved by the state supervisor of homemaking education.

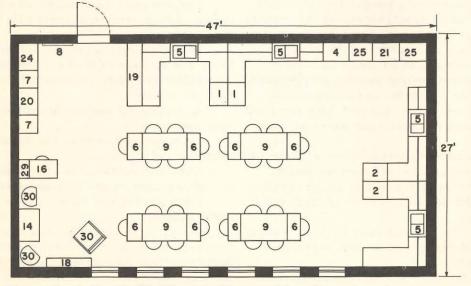


Figure I. A Small All-Purpose Homemaking Department.

dining table

19. Open book

shelves

9. Classroom and

1. Gas range

- 2. Electric range
- 4. Refrigerator
- 5. Sink
- 6. Sewing machine
- 7. Tote travs
- 8. Bulletin board
- 14. Dropleaf table 24. Utility 25. Staple supplies 16. Teacher's desk 18. Bookcase 29. File
 - 30. Chair
 - 31. Aprons

21. Storage

20. Garment storage

THE HOMEMAKING DEPARTMENT

WHERE TO LOCATE THE DEPARTMENT

In Iowa it is recommended that the homemaking department be located on the first floor of the high school building. The advantages of housing the department in this location are:

Less expensive for installation of utilities. Better location for delivery service and removal of waste.

More accessible for use by adults.

Keeps home economics in closer relation to school as a whole.

When two or more rooms are provided for the homemaking program, they should be connected. This arrangement will be more convenient and make possible the optimum use of space and equipment as well as of the teacher's time.

- 4 -

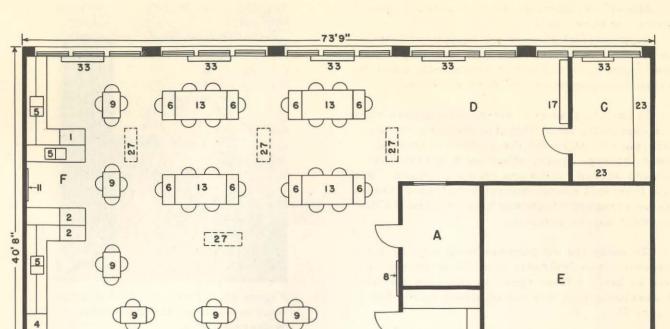


Figure II. Homemaking Department, Jefferson, Iowa.

5

2

5

A. Office

23

B. Fitting room

10 12

- C. Storage
- D. Living area
- E. Audio-Visual
- (Used by entire
- school)
- F. Demonstration
- kitchen
- 1. Gas range

2. Electric range 4. Refrigerator

5

- 5. Sink
- 6. Sewing machine
- 7. Tote trays
- 8. Bulletin board
- 9. Dining table
- 10. Washer
- 11. Chalk board
- 12. Clothes dryer

The school lunch kitchen and the homemaking department should be housed separately.

WHICH TYPE OF DEPARTMENT IS SUITED TO A GIVEN SCHOOL?

The All-Purpose Room

One room equipped to teach all areas of a homemaking program is called an all-purpose room.

In the majority of high schools in Iowa where one homemaking teacher is employed, one large all-purpose room is preferable to two laboratories, or to several small rooms. It provides for more efficient use of space and equipment. It is also more adaptable to varied uses.

- Sewing and
 classroom table
 Book storage
 Garment storage
 Utility and storage
 Ironing board
 Radiator
- Architect -

Karl Keffer & Associates, Des Moines

The following floor space is suggested as the minimum for an all-purpose room: For 20 to 24 pupils — a room 26'x50'.

В

20

For 16 pupils $-a \operatorname{room} 26'x40'$.

When possible rooms that are 26' wide are desirable. If the room is wider, the length may be reduced. Only four unit kitchens can be planned for rooms with these dimensions. See Figure I.

To provide necessary space and equipment for all phases of homemaking, plans for a flexible arrangement of equipment will be needed. This can be done by providing:

Multiple use of equipment, such as tables and chairs for study, discussion centers, clothing construction, and meal service.

Movable equipment, such as screens, partitions, or book cases.

Supplemental storage for equipment that is not in continuous use, such as a rollaway bed and other home care of the sick equipment, child development equipment, and sewing machines.

In selecting an area for an all-purpose room, it is especially important that there be enough wall space to allow for the number of unit kitchens, storage space, other built-in features that are needed, and some free wall space. With such free wall space, attractive interest centers can be arranged which will help to make the department appear homelike.

To make the all-purpose room appear more spacious, it is desirable to avoid partitions and have as large a floor space as possible for the discussion center and use of visual aids. See Figure II.

Two-Room Department

The two-room department usually has more floor space than an all-purpose room, and is planned for two teachers. As previously mentioned, adjacent rooms are recommended. In some cases the accordion partition is desirable in order to throw the entire space together for special occasions. See Figure III. The most common division of space is as follows:

A room for foods, home management, and laundering.

A room for clothing, home furnishings, home nursing, child development, and a social living center.

BASIC CONSIDERATIONS

PROVISION FOR USE OF ELECTRICITY AND GAS³

"It is important that provision be made in the architect's plans for adequate electric and gas service. The electrical supply lines should be designed to provide an amount of current necessary to meet immediate and future needs for outlets and special equipment. Also provisions should be included for installation of equipment and appliances requiring special wiring circuit load. The location of both immediate and future equipment should be indicated MENT FOR HOMEMAKING PROGRAMS³, on the floor plan so as to insure proper placement of electric and gas outlets."

"The homemaking department in the school presents a somewhat different problem from the one in the home in that several different appliances may be in operation at the same time, which increases the load." It is therefore



Figure III. The accordion door is used to separate the two rooms at Winterset, Iowa.

Each room would be equipped with the supplies, illustrative materials, equipment, and storage facilities needed for the particular phases of homemaking for which it is planned. In such a department when two teachers are employed and each one teaches all phases of homemaking, an exchange of rooms at various times will need to be made. See Figure IV.

In some two-teacher schools, it may be preferable to plan for two all-purpose rooms. Two such rooms would eliminate the need for teachers to exchange rooms throughout the day or throughout the year. It would be the more expensive plan.

essential that sufficient circuits be provided to take care of the power required.

It is important that the teacher indicate to the architect the type and number of electrical appliances to be used, where they will be used, and the desired location of the outlets. The location of the outlets for certain electrical appliances is important for their efficient use.

For types of branch circuits required for electric equipment, see SPACE AND EQUIPpage 57.

LIGHTING

The lighting for the department, whether natural light or artificial, should provide a diffused light without glare. The artificial light must be sufficient to supplement the daylight on

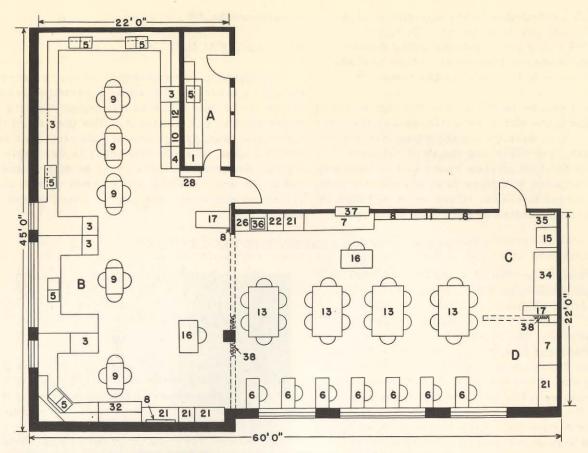


Figure IV. Homemaking Department, Winterset, Iowa.

A. Concession room B. Demonstration kitchen C. Living area D. Fitting area 3. Range

- 4. Refrigerator
- 5. Sink
- 6. Sewing machine
- 7. Tote trays
- 8. Bulletin board

- 9. Dining table

- 15. End table

10. Washer

11. Chalk board

13. Sewing and

classroom table

12. Clothes dryer

- 16. Teacher's desk
- 17. Book storage
- 21. Storage
- 22. Ironing board
- storage
- 26. Teacher's closet
- 28. Ironer 32. Freezer 34. Davenport 35. Magazine rack 36. Lavatory 37. Display case 38. Accordion type partition
- Architects -Smith-Voorhees-Jensen & Associates, Des Moines

dark days and to make it possible for adult evening classes to work at night. The lighting for areas where close work, such as sewing or reading, is done and where the pupils work at a counter as in the unit kitchens, must be planned to provide light in the quantity and in the direction needed.

FLOOR COVERING

"No one flooring or floor covering has been found to be entirely satisfactory in the homemaking The extent to which attractiveness can be acdepartment. The problem is one of selecting the type with the money available that has the most ad- walls, the flooring and floor treatment, the type vantages according to the use, durability, suitability and care required. The safety factor is also furnishings selected and their arrangement. important. The durability of some materials com- Creating beauty in the department should not inpensates in large measure for their high initial cost. "3

Types of flooring now commonly used are wood, a good grade of linoleum, asphalt and other types of tile. The type of floor covering used in the kitchen area should be grease resistant.

PAINTING AND DECORATING

"Homemaking rooms should be so attractive that the girls in school enjoy working in them. complished depends on the color and finish of the of lighting and fixtures used, the furniture and terfere with the functional quality of the equipment and furnishings. "4

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"Color contributes to the enjoyment of the people who use the department. Constant association with color combinations in the department helps students develop an ability to make wise choices in using color in the home. "4

through the table and work surfaces and the floor water system can handle it. The placing of the covering. It is wise to use the same wall colors, automatic laundry equipment will also need to be floor finish, and color and finish of cabinets throughout the unit kitchen space and to have any a given department. The location of a washer desired variation in colors in small objects with- and drier was carefully considered in both the in the different kitchens. Care must be taken to be sure that the entire effect in the total space

is harmonious."3

SANITARY FACILITIES

In planning for plumbing, adequate provision should be made for installing a garbage disposal "Color can be introduced in the unit kitchens in one of the unit kitchens, provided the city decided upon, if such equipment is desirable in Jefferson and Winterset plans. See Figures II and III.

EQUIPPING AND FURNISHING THE DEPARTMENT

The dual objective of achieving a homelike environment and also a functional working arrangement for classes requires very careful planning. Exact placement and arrangement of basic equipment and furnishings as well as of built-in cabinets and storage must be shown in blue-print drawings in order to indicate needed plumbing and electric outlets. At this point a choice must be made between custom-made cabinets (see Figure III) and ready manufactured units (see Figure II). Each has certain advantages and also disadvantages. Commercial companies issue catalogs that offer many ideas that will help in the preliminary planning.



Figure V. Unit kitchens in U shape arrangement, with natural finish wood cabinets, Winterset, Iowa.

FOR FOOD PREPARATION

The unit kitchen arrangement with serving tables and chairs adjacent to each unit is recommended for teaching meal preparation and service. The unit kitchen arrangement is comparable to a home situation as shown in Figures V and VI. The most common practice is to have four pupils work together in each unit kitchen.



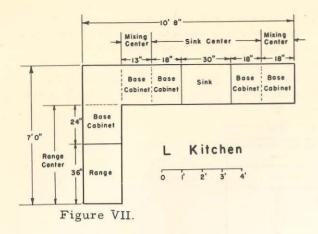
Figure VI. An L shape unit kitchen with commercially built metal cabinets, Jefferson, Iowa.

Figures VII and VIII offer suggestions for the arrangement of equipment in the L and U kitchens. Each kitchen provides 1 sink center, l range center, and 2 mixing centers. Wall cabinets are mounted in the sink center. There is space in either type kitchen for four girls. At least 8 to 10 linear feet of counter space is required for each unit kitchen.

Partitions between unit kitchens are not recommended, and neither is it desirable to place wall cabinets back to back forming partitions between unit kitchens.

A refrigerator should be accessible to all units. With the trend toward more home freezing of meats, fruits, and vegetables, space for a deep freeze might well be provided in planning. It should be outside of the unit kitchens and yet near to the one that most nearly approximates the home kitchen or to the demonstration center. See Figures IV and V, the Winterset plan.

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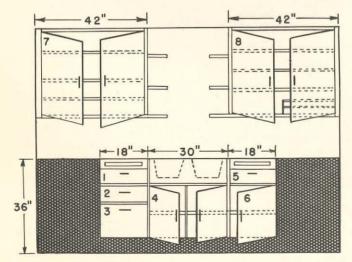


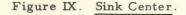
If adequate facilities for dry towels cannot be provided in each unit, an electric dryer may be practical for the department as a whole.

SUGGESTIONS FOR ARRANGEMENT OF SUPPLIES AND SMALL EQUIPMENT IN SCHOOL KITCHENS

The location of the large equipment in school kitchens influences management practices. However, the arrangement of small equipment and supplies in convenient work centers is even more important. Arrangement of small equipment and supplies may involve only a small expenditure and will more than justify the cost.

As a basis for planning the cabinets for unit kitchens to save energy and time, reduce confusion and congestion, and bring satisfaction to pupils, suggested arrangements for placing equipment in work centers are offered in Figures IX, X, XI, and XII.





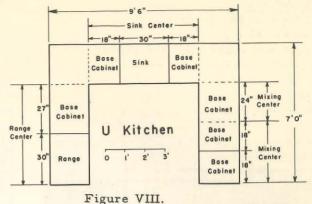
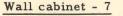


Figure IX shows the arrangement for dishwashing and fruit and vegetable preparation. In this is a sink (single or double) with at least 18" work space on each side and storage space, thus making it possible to stack, wash, and store dishes and to prepare fresh fruits and vegetables. A wall cabinet to the left of sink for storage of dishes and silver reduces a great deal of congestion and interference.

Small Equipment

Drawer 1 Rubber scraper Kitchen shears Potato peeler or rotary cutting knife Can opener Drawer 2 2 knives, paring and slicing Tablespoon Set measuring spoons Glass measuring cup Drawer 3 Miscellaneous large equipment Under Sink - 4 Cleaning supplies Detergent Scouring powder Scouring pad (rust proof) Vegetable brush Newspapers Provision for garbage disposal Drawer 5 Paper towels Dish cloth or sponge Dish towels Liners for waste basket Shelves - 6 1 or 2 mixing bowls Colander Strainer - medium mesh Grater or shredder Sauce pan Utility tray Cutting board (if not built in)



Glasses, cups, saucers Plates, salad plates Cream and sugar, salt and pepper Vegetable dishes, chop plate Serving silver Wall cabinet - 8

Staple supplies

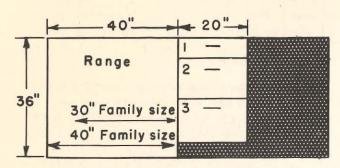


Figure X. Range Center.

Figure X consists of a range and an 18" to 36" base cabinet for storage space for small equipment that is first used at the range. The range may be family-size or apartment-size. The apartment-size range requires at least 12" more cabinet space than the family-size range.

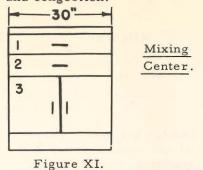
Small Equipment

Drawer 1

Hot pad holders Matches in container Teaspoons - tasting and measuring Stirring spoons - wooden and slotted Forks - case and meat Drawer 2 Whirl whip with spring Jar filler Ladle Measuring cup Can opener Rubber scraper Potato masher Mesh strainer - to fit top of cup Drawer 3 l double boiler l sauce pan with cover, 1 qt. 1 sauce pan with cover, 2 qt. 1 skillet and cover, 10" 1 or 2 cooling racks

(This might be drawer, swing shelves, or pullout shelf.)

A mixing center consists of a work surface with storage space for staple supplies and small equipment used in preparing baked foods. Two mixing centers are recommended for a school kitchen because of the number of workers and the length of class periods for preparation and serving of the food. A second center aids a great deal in making it possible for three or four workers to get out and put away equipment with a minimum amount of time, interference, and congestion.



Small Equipment

Drawer 1 Paring knife Measuring spoons Mary Ann cups 2 cup measuring cup Spatula Egg beaters, Dover and whisk Mixing spoons, wooden and slotted Rubber scraper Tablespoon Teaspoon Drawer 2 Grater Lemon reamer Biscuit cutter Pastry blender Rolling pin Wax paper Drawer 3 Mixing bowls Bread board Cookie sheet Muffin pan Bread pan Cake pans Pie pan Cooling rack Utility tray Flour sifter



Second Mixing Center.

Figure XII.

Small Equipment

Drawer 4

Lemon reamer Biscuit cutter Pastry blender Rolling pin Fine sieve Wax paper

Drawer 5

Measuring spoons Mary Ann cups 2 cup measuring cup Spatula Egg beaters Mixing spoons Rubber scraper Tablespoon Teaspoon

Drawer 6

6 custard cups

2 Pyrex baking dishes, round and oblong 1 casserole, $l\frac{1}{2}$ qt.

FOR CLOTHING

The planned placement of sewing machines and pressing equipment determines the location of electric outlets. Satisfactory lighting for work is also important.

In general, there are two commonly used plans for the placing of sewing equipment. One arrangement provides for sewing units. Each unit includes a machine at either end or near the sewing tables and a pressing center. This makes for convenient use of equipment by pupils and results in less confusion and cross traffic. For this arrangement, electric outlets need to be placed in the floor at approximate locations where the machines will be used. Figure XIII.

Well planned storage is as important in a homemaking department as in a home because learning experiences in the various areas of home and family life require a variety of furnishings and equipment. These areas are:

Foods and nutrition, including selection, preparation, and serving meals.

Clothing, including selection, care, renovation, and construction.

Housing, including furnishings, house care, and equipment upkeep.

Child development. Family and community relationships. Home management. Home care of the sick. Home laundering. When the floor space is large enough to permit arrangement of chairs for discussion and demonstration centers in addition to the sewing units, this plan is recommended.



Figure XIII. Provision for electric machines on either end of table is made by covered floor outlets at Jefferson, Iowa.

The homemaking department should be planned to provide space for several pressing centers. A pressing center includes a portable ironing board or a press board, an iron, and pressing aids, such as a tailor's ham, a sleeve roll and a press cloth. An optimum arrangement provides a pressing center as a part of each sewing unit.

In the second plan, machines are apart from the tables and often placed along the side of the room. This plan provides for a bit more flexibility in the use of the sewing tables for other purposes and more condensed arrangement of machines when they are not in use. See Figure IV.

The homemaking teacher and State Supervisors need to be consulted in making these decisions in relation to the above arrangements for sewing.

STORAGE FACILITIES

The equipment for teaching many of these areas is small and is used for only part of the year. This necessitates good storage that can be achieved by very careful planning.

Insofar as practical, all storage space should exemplify standards for home storage and provide opportunity for pupils to have experiences in planning, organizing, and utilizing storage space.

Three types of storage space should be considered in light of over-all size and shape of space allotted to the homemaking department.

Built-in storage cabinets within the homemaking room bring stored materials near to cen- By placing the "Tote" tray cabinets in different ters where they will be used, and makes them easily accessible without congestion or wasting of time. The disadvantage is that they require so much wall space that sometimes little is left for arrangement of a living center for homelike atmosphere.

The separate storeroom leaves more wall space in the homemaking room and provides a place for changing garments and for fitting. The disadvantages are that it may take needed floor space from the department, materials will not be as convenient to all work centers, and results in crowding when pupils are taking out and returning their materials.

A combination of separate storeroom and built-in cabinets within the homemaking room is a third possibility that is often preferred. Those materials less frequently used are then kept in the storeroom. Those general supplies and utensils that are always needed in food preparation or in clothing are kept in especially designed built-in cabinets near the appropriate work centers.

FOR CLOTHING MATERIALS

The "Tote" trays have proved most successful for storing pupils' individual materials, especially when sewing. These are more economically arranged in banks with open pull-out trays that can be safe and clean behind closed doors. See Figure XIV.

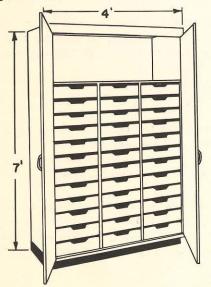


Figure XIV. 4 "Tote" tray cabinet.

The most satisfactory size for the trays is 5 by 15 inches and 18 to 22 inches in depth. These may be planned in banks of 18, 24, or 36 trays, each bank being an individual cabinet or

adjoining other storage space. See Figure XV. areas of the room, materials can be handled by pupils without congestion. If the tables are equipped with correctly placed grooves underneath, the trays can be slipped out of the way and thus safeguard an adequate sewing surface.

Pressing equipment requires storage that is definitely planned for the ironing boards and other pressing tools and materials. If storage cabinets cannot be provided near each sewing unit, a centrally located larger cabinet will be necessary. It can usually be planned in connection with other storage or "Tote" tray banks. See Figure XV.

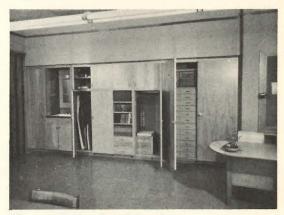


Figure XV. Combination grooming center and "Tote" trays adjoining other storage space in Winterset, Iowa.

Storage space is also needed in clothing work for hanging garments. This is usually planned as a cabinet with a strong rod long enough to accommodate the largest number of pupils who will be sewing at one time. Doors to such a cabinet can serve as a fitting center if mirrors are properly attached to them. See Figure XVI.

GENERAL STORAGE

In planning for storage space beyond that needed for work units in food preparation and clothing construction, the following are types of materials and supplies that call for special planning:

Home nursing equipment. Child development materials. Articles used periodically in living area. FHA materials. Illustrative materials. Books and bulletins. Charts and posters. Cleaning equipment and supplies.

Efficiency in use of all of these is determined by their accessibility and cleanliness when brought out of storage.



Figure XVI. Mirrors on doors to wardrobe for hanging garments provide a fitting center at Winterset, Iowa.

General principles for good utilization of storage space are suggested in SPACE AND EQUIPMENT FOR HOMEMAKING PROGRAMS. 4

Those that are important in planning for storage are:

1. Space should be conserved by building cabinets with shelves that can be adjusted to conform to heights of utensils to be stored on them. Half shelves and movable step shelves should be used for smaller articles to make good use of space.

2. Shelves should be 4 inches narrower than the inside width of a cabinet to allow space for articles placed in racks or hung on the door.

3. Movable trays or a "pull-out" section, rather than shelves should be provided in some cabinet bases to facilitate removing articles.

4. Tools used for cleaning should be stored separately from other equipment.

5. Built-in grooves should be provided for ease in taking out and putting back folding tables, screens, ironing boards, and the like.

6. A removable section of vertical divisions is convenient for storing bread pans, platters, lids, trays, and the like.

REFERENCES

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