AN ABSTRACT OF THE THESIS OF

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Title: Opinions of Home Economics Leaders concerning Locating, Arranging, and Equipping Homemaking Departments

Abstract Approved:

(Major Professor)

One hundred thirty-one teacher trainers, state supervisors, and city supervisors representing the forty-eight states and Hawaii contributed their beliefs and decisions to this study. It may be said that locating, arranging, and equipping homemaking departments presents unsolved problems to educators in the field. Probably the establishment of a common philosophy of home economics education and a standardization of communities and children would be necessary before any principles could be established and applied.

A majority of homemaking educators would choose to have the homemaking department within the main high school building rather than in a separate cottage. The desire to have homemaking an integral part of the pupil's school life, the convenience, and the economy of building and maintenance were factors which determined this decision.

An analysis of the data relative to the types of room arrangement for homemaking departments shows that a majority of the educators do not believe that they could choose any one type as being superior in all situations. The combination room providing for the rotation of all the homemaking activities within one room was considered most desirable. The success of such a room, however, depends on the ability of the teacher to carry on several major
activities at one time so that a maximum of learning occurs.

The study of arrangements for serving meals indicates that no one arrangement may be recommended for all situations. The small tables with each preparation unit are considered desirable in any situation because serving can be taught as a part of meal preparation and everyone in the class may have an opportunity to gain experience in serving. In addition, the small tables are considered economical of space, time, and energy.

It may be assumed that the philosophy of educating for homemaking which one has will largely determine the type of room and the serving arrangement which one would choose. If the paramount objective of the educator is to establish skills in working, the one-room laboratory equipped for practice will be preferred. If the aim is to develop learnings relative to foods along with other homemaking activities, then various combinations of working areas and rooms will be featured.

In general, the trend appears to be in favor of the unit kitchen for four pupils as a work unit with increased emphasis on typifying the home kitchen. Different equipment in the units provides for additional variety of experiences in using, studying, and evaluating the different kinds of equipment through rotation of activities. These leaders saw no need for the foods room of junior high schools being any different from the room recommended for the senior high school classes.

It is considered by homemaking educators to be advantageous to have a maximum limit of 24 for foods classes. Standard equipment for meal preparation seems desirable since the same equipment may, if necessary, be used in developing skills with single foods.
OPINIONS OF HOME ECONOMICS LEADERS CONCERNING LOCATING, ARRANGING, AND EQUIPPING HOMEMAKING DEPARTMENTS

by

JUSTINE BEYERS O'REILLY

A THESIS submitted to the OREGON STATE COLLEGE in partial fulfillment of the requirements for the degree of

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APPROVED:

Head of Department of Home Economics Education
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Chairman of School Graduate Committee

Chairman of College Graduate Council
ACKNOWLEDGMENTS

The writer wishes to make a general acknowledgment to all those teacher trainers and supervisors of home economics who contributed to this study. Many valuable opinions evolving from their rich background of experiences have thus been made available to others.

To Doctor Florence E. Blazier, adviser, whose assistance, encouragement, and inspiration have extended far beyond the confines of this study, the writer wishes to express her appreciation.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>INTRODUCTION TO THIS STUDY.</td>
</tr>
<tr>
<td></td>
<td>The Problem and Its Setting</td>
</tr>
<tr>
<td></td>
<td>Groups Represented</td>
</tr>
<tr>
<td></td>
<td>Construction of the Questionnaire</td>
</tr>
<tr>
<td></td>
<td>The Distribution of the Questionnaires</td>
</tr>
<tr>
<td></td>
<td>Analysis of the Questionnaire</td>
</tr>
<tr>
<td></td>
<td>Procedure Followed in Analyzing Data</td>
</tr>
<tr>
<td>II</td>
<td>LOCATION OF THE HOMEMAKING DEPARTMENT</td>
</tr>
<tr>
<td></td>
<td>OPINIONS RELATIVE TO THE LOCATION OF THE HOMEMAKING DEPARTMENT</td>
</tr>
<tr>
<td></td>
<td>Location of the Homemaking Department Within the High School Building</td>
</tr>
<tr>
<td></td>
<td>Location of the Homemaking Department Within the Separate Cottage</td>
</tr>
<tr>
<td></td>
<td>Homemaking Departments Located in the School Building or in the Separate Cottage Are Equally Advantageous</td>
</tr>
<tr>
<td></td>
<td>Other Comments on Location</td>
</tr>
<tr>
<td></td>
<td>Summary of Opinions Concerning the Location of the Homemaking Department</td>
</tr>
<tr>
<td>III</td>
<td>TYPES OF ROOM ARRANGEMENT FOR HOMEMAKING DEPARTMENTS.</td>
</tr>
<tr>
<td></td>
<td>JUDGMENTS OF HOMEMAKING EDUCATORS CONCERNING ARRANGEMENTS FOR HOMEMAKING DEPARTMENTS</td>
</tr>
<tr>
<td></td>
<td>Combination Homemaking Room or Rooms Providing Adequate Space and Equipment for Each Member of the Class to Carry on the Same Type of Activity at the Same Time</td>
</tr>
<tr>
<td></td>
<td>Combination Homemaking Room or Rooms Providing Only Space and Equipment for Rotation of Activities</td>
</tr>
<tr>
<td></td>
<td>Separate Rooms for Foods and Clothing</td>
</tr>
<tr>
<td></td>
<td>Separate Rooms for Foods, Clothing, and Dining Room</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Separate Rooms for Foods, Clothing and a Living Room that Could Be Used for Dining.</td>
<td>66</td>
</tr>
<tr>
<td>Separate Rooms for Foods, Clothing, and an Apartment Consisting of Living Room, Bedroom, Dining Center, Kitchen, and Bathroom.</td>
<td>72</td>
</tr>
<tr>
<td>Other Types.</td>
<td>79</td>
</tr>
<tr>
<td>Summary of Opinions Concerning the Types of Room Arrangements for Homemaking Departments.</td>
<td>32</td>
</tr>
<tr>
<td>IV ARRANGEMENTS FOR SERVING MEALS</td>
<td>88</td>
</tr>
<tr>
<td>OPINIONS RELATIVE TO ARRANGEMENTS FOR SERVING MEALS</td>
<td>88</td>
</tr>
<tr>
<td>Small Tables Provided for Each Unit Kitchen or Unit Desk.</td>
<td>90</td>
</tr>
<tr>
<td>Corner or End of Laboratory or Homemaking Room Arranged as a Dining Center.</td>
<td>94</td>
</tr>
<tr>
<td>Separate Dining Room.</td>
<td>98</td>
</tr>
<tr>
<td>Both Small Tables and Separate Dining Room.</td>
<td>101</td>
</tr>
<tr>
<td>A Living Room Which Can Be Used for Dining As Well As for Other Activities</td>
<td>105</td>
</tr>
<tr>
<td>Other Desired Arrangements.</td>
<td>110</td>
</tr>
<tr>
<td>Summary of Opinions Concerning Arrangements for Serving Meals.</td>
<td>112</td>
</tr>
<tr>
<td>V ROOM ARRANGEMENTS FOR TEACHING FOODS</td>
<td>117</td>
</tr>
<tr>
<td>Type of Room</td>
<td>118</td>
</tr>
<tr>
<td>Type of Work Unit Used in the Foods Room</td>
<td>122</td>
</tr>
<tr>
<td>Number of Pupils in Each Group Arrangement</td>
<td>124</td>
</tr>
<tr>
<td>Provision for Serving Meals.</td>
<td>124</td>
</tr>
<tr>
<td>Provision for Discussion Center.</td>
<td>125</td>
</tr>
</tbody>
</table>
Chapter 2

Unit Kitchen Arrangements: .......... 126
  U-shape Units. ................. 127
  Parallel-shape Unit. ............ 127
  L-shape Unit ................... 129
  Wall Units .................... 129
  Unclassified Patterns .......... 129

Arrangements of Sink, Stove, and Other Work Areas. 131

Equipment as Related to the Room Arrangement .... 135

Modifications of the Foods Room for Varying situations ..... 136
  Modifications for Limited Funds ............ 139
  Modifications for Small Classes ............ 141
  Modifications for Classes of More than Twenty Four Pupils 142
  Modifications for Age Differences 145

Summary of Opinions Concerning the Room Arrangements for Teaching Foods 148

VI SELECTION OF SMALL EQUIPMENT 153

Articles of Equipment to be Stored Within the Unit Kitchen .... 154
  Variations in Size of Equipment Recommended 155
  The Number Recommended for Each Different Size of Utensil .... 158
  Number of Different Sizes of a Single Utensil Recommended ... 164
  Number of a Single Utensil Provided in Each Unit Kitchen .... 165

Articles of Equipment to be Stored Elsewhere in the Room 170

The Number of Pupils for Whom to Plan in Each Unit 176

Similarity or Variations in Equipment in the Different Units 180

Summary of Opinions Concerning the Selection of Small Equipment 185
Chapter | Page
--- | ---
VII | PRACTICES IN TEACHING FOODS. 189
| Minimum Size for Foods Classes 190
| Size of Groups for Preparing Meals 195
| Food Preparation and Serving Equipment for Individual Class Members 203
| Preparation of a Single Food 208
| Summary of Opinions Concerning Practices in Teaching Foods 213

VIII | MATERIALS RECOMMENDED FOR SMALL EQUIPMENT AND WORK TABLE SURFACE 218
| Materials Recommended for Small Equipment 219
| Materials Recommended for Work Table Surface 224
| Summary of Opinions Concerning Materials Recommended for Small Equipment and Work Table Surface 233

IX | CONCLUSIONS AND RECOMMENDATIONS 236

APPENDIX 248
| The Comments of the Homemaking Education Leaders Contributed on the Questionnaire 249
| Explanation of Combination Rooms Referred to in Table 14 253
| Amount of Equipment to be Stored in the Room Other than Within the Units 255
<table>
<thead>
<tr>
<th>Table Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Distribution of the People Filling out the Questionnaire.</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Opinions Relative to the Location of the Home-Making Department.</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Opinions Relative to Locating the Homemaking Department Within the School Building.</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Opinions Relative to Locating the Homemaking Department in a Separate Cottage</td>
<td>18</td>
</tr>
<tr>
<td>5</td>
<td>Homemaking Departments Located in the School Building or in the Separate Cottage Are Equally Advantageous</td>
<td>27</td>
</tr>
<tr>
<td>6</td>
<td>Judgments of Homemaking Educators Concerning Arrangements for Homemaking Departments</td>
<td>38</td>
</tr>
<tr>
<td>7</td>
<td>Judgments Concerning the Combination Homemaking Room or Rooms Which Provide Adequate Space and Equipment for Each Member of the Class to Carry on the Same Type of Activity at the Same Time.</td>
<td>40</td>
</tr>
<tr>
<td>8</td>
<td>Judgments Concerning the Combination Homemaking Room or Rooms Providing Only Space and Equipment for Rotation of Activities</td>
<td>47</td>
</tr>
<tr>
<td>9</td>
<td>Judgments Concerning the Homemaking Department Which Provides Separate Rooms for Foods and Clothing</td>
<td>54</td>
</tr>
<tr>
<td>10</td>
<td>Judgments Concerning the Homemaking Department Which Provides Separate Rooms for Foods, Clothing, and Dining Room</td>
<td>61</td>
</tr>
<tr>
<td>11</td>
<td>Judgments Concerning the Homemaking Department Which Provides Separate Rooms for Foods, Clothing, and a Living Room that Could Be used for Dining</td>
<td>67</td>
</tr>
<tr>
<td>12</td>
<td>Judgments Concerning the Homemaking Department Which Provides Separate Rooms for Foods, Clothing, and an Apartment</td>
<td>73</td>
</tr>
<tr>
<td>13</td>
<td>Approved Arrangements for Serving Meals</td>
<td>89</td>
</tr>
</tbody>
</table>
Table Number

14  Types of Rooms Recommended for Teaching Foods   . . . 119
15  Types of Work Units Used in Foods Rooms   . . . 123
16  Arrangements of Sink, Stoves, and Other Work Areas   . . . 132
17  Modifications of the Foods Room for Situations Where Funds Are Limited; Classes are Small; Classes Are Large   . . . 138
18  Number of Different Sizes in Utensils Recommended   . 156
19  The Number Recommended of Each Different Size of Utensil   . . . 159
20  Number of Different Sizes of a Single Utensil Recommended for One-Unit Kitchen   . . . 164
21  Number of a Single Utensil Provided in Each Unit Kitchen   . . . 166
22  Opinions Relative to the Size of Groups For Which To Plan in the Units   . . . 177
23  Similarity or Variations in Equipment In the Different Units   . . . 181
24  Opinions Relative to a Maximum Size for Foods Classes   . . . 191
25  Opinions Relative to the Size of Groups for Preparing Meals   . . . 196
26  Materials Recommended for Small Equipment   . . . 220
27  Opinions Relative to Materials Recommended for Work Table Surface   . . . 225
INTRODUCTION TO THIS STUDY

The Problem and Its Setting

In considering the planning and equipping of a high school foods laboratory, it was discovered that there was practically no material available on the opinions of teachers concerning desirable practices in foods laboratories. To obtain these opinions it seemed necessary to devise a questionnaire which could be distributed extensively.

Groups Represented

Three types of educators were selected to give this information: teacher trainers, state supervisors and city supervisors. The lists of these persons were obtained from the United States Office of Education.

The teacher trainers lists include heads of home economics education departments and other members of their staffs. These women are supervisors of student teaching and teachers of other home economics education courses. The United States Office of Education lists include only teacher trainers from institutions approved for teacher training by the Division of Vocational Education of the United States Office of Education. However, since these institutions, eighty-two in
number, are the largest and best known of all the institutions where teachers of homemaking are being trained, the use of such a list insures the most experienced educators in this particular field.

The list of state supervisors includes the chief of that service in the state, her assistants and district supervisors. These women are usually as well trained as the heads of home economics education departments, in fact, they have frequently been teacher trainers before accepting a position as state supervisor. They differ in experience from the teacher trainers in that they are constantly in the field and come in contact with real problems. As a group, their opinions must be taken as valuable.

The list of city supervisors has 141 in number and includes all of the largest towns and cities in the United States. Many of these women have come up through the ranks of high school teachers in the particular cities in which they are supervisors and their experience tends to be limited to the one town or city. They have had very real problems in dealing with administrators and are very conscious of teacher attitudes toward equipment and supplies. Their judgments must be regarded as valuable, but as usually more limited than the other two groups.

**Construction of the Questionnaire**

In constructing this questionnaire, questions for which an answer was desired were designed and were put into an appropriate form. Mimeographed copies of these were distributed among educators who were
to be included in the lists and whose assistance in such an undertaking could be assured. Their response was prompt and exceedingly helpful. As a result of the advice of this group, the questionnaire was revised and put in its final form.

An obvious defect of the questionnaire was that not sufficient space was allowed in all sections for the informal comments which are so valuable.

The Distribution of the Questionnaires

One hundred thirty-one questionnaires were returned, and their opinions and judgments have been incorporated in this study. Fifty-four teacher trainers representing 34 different states returned the questionnaires. Thirty-four state supervisors, including some assistant, regional, district, county, and local supervisors, returned the questionnaire checked to varying extents. These supervisors represented 27 states and Honolulu. Forty-three city supervisors, representing 21 states, returned their questionnaires, with more coming from the states which have several large cities as New York, California, and Michigan. Table 1 shows the distribution of the people filling out the questionnaire.
TABLE 1

The Distribution of the People Filling Out the Questionnaire

<table>
<thead>
<tr>
<th>Positions of Personnel</th>
<th>Number</th>
<th>Per Cent</th>
<th>Number of States Represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Trainers</td>
<td>54</td>
<td>41.2</td>
<td>34</td>
</tr>
<tr>
<td>State Supervisors</td>
<td>34</td>
<td>26.1</td>
<td>27</td>
</tr>
<tr>
<td>City Supervisors</td>
<td>43</td>
<td>32.9</td>
<td>21</td>
</tr>
<tr>
<td>Totals</td>
<td>131</td>
<td>100</td>
<td>48</td>
</tr>
</tbody>
</table>

All states and Honolulu are represented in this study. Some states are represented more heavily as California with ten and New York with nine persons returning questionnaires, while others are represented by one person only. Oregon has six teacher trainers, the state supervisor and her assistant, included in the study.

Analysis of the Questionnaire

The many ramifications of this study may best be indicated by some of the comments gleaned from letters accompanying the returned questionnaires: (See Appendix, p. 249)

A teacher trainer from Louisiana State University comments: "I think the problem you are working on is a very big one, but, just as the problems arise in the home, so many decisions depend upon money, space, life in the home or the use of the department."
The Head of a Teacher Training Department, New York state remarked: "As is usually the case, so many questions arise in working on problems of this sort that it is difficult to know how best to represent one's real philosophy and ideas."

A Detroit Michigan city supervisor commented: "Many of the questions on this check list seem perhaps a little difficult to check definitely 'yes' or 'no', in as much as so many factors necessitate certain changes from the ideal. Also, the background of the student and the home environment have quite a definite bearing on the matter."

A state supervisor from California remarked: "We all agree that it would be very difficult, indeed, to indicate under what conditions a given set of combinations should be used."

In spite of these varying factors, however, many tendencies are evident, and many opinions common to large numbers of persons deserve consideration. After similar ideas and recommendations were tabulated, some pertinent conclusions may be drawn.

Procedure Followed in Analyzing Data

To facilitate digesting the valuable comments contributed on the questionnaires, the study was divided into seven parts. These different sections deal with some of the aspects of locating, arranging and equipping homemaking departments with special emphasis on the room for teaching foods. The seven sections may be termed:

I. Location of the Homemaking department;
II. Room Arrangements for Homemaking Departments;
III. Arrangements for Serving Meals;
IV. Room Arrangements for Teaching Foods;
V. Selection of Small Equipment;
VI. Practices in Teaching Foods;
VII. Materials Recommended for Small Equipment and Work Table Surfaces.

Each section was analyzed separately. Each phase was viewed first in its entirety to ascertain any tendencies, consistencies, or philosophies expressed or evidenced. Next the specific parts of the sections were analyzed individually. The evaluations, reasonings, or recommendations were sorted roughly, at first, into main groupings. A survey of the various comments within each main grouping, then, suggested further sorting, so this was done in outline form, having main classification headings, sub-points, and frequently several more specific factors following under the sub-divisions.

Tables were then constructed in which the findings could be recorded in condensed form without necessitating any interpretation of the comment on the part of the writer. In connection with the findings, the number of different individuals mentioning the preference or reason could be recorded. Furthermore, the table would show from which group, teacher trainer, state supervisor, or city supervisor the numbers of references came. Total number of questionnaires could not be indicated in connection with the reasons listed since some individuals might give several of them.

A discussion of the findings will constitute the theme of the remainder of this manuscript.
CHAPTER II

LOCATION OF THE HOMEMAKING DEPARTMENT

In recent years there has been much pondering over the question of locating the homemaking department. Indeed, there is some satisfaction in the seeming progress over the first physical situations in which cooking and sewing were taught. However, this degree of satisfaction is not sufficient. Homemaking educators have wandered through a period of experimenting with various locations in the regular school building, out in cottages, and in other buildings. Still there is much groping with little certainty as to what is best. Whether a new department is being located, or whether the present plant is being enlarged, remodeled, or completely reorganized, this factor must be considered.

Some of the elements to be considered before the problem of location can be faced are: the school situation, the funds available, the philosophy and ability of the homemaking teacher, the purposes of the homemaking course, the community to be served, and the climate. Two possibilities appear most advantageous: (1) within the school building, or, (2) in a separate cottage.

When this study was being organized, it seemed important to ascertain what some of the present leaders in homemaking education thought about locating a department.
OPINIONS RELATIVE TO THE LOCATION OF THE
HOMEMAKING DEPARTMENT

Of the 128 questionnaires received from teacher trainers, state supervisors, and city supervisors, 116 expressed some attitude regarding the location of the homemaking department. In considering whether the department should be located in the high school building or in a separate cottage, an analysis of the comments is shown in Table 2.

TABLE 2

<table>
<thead>
<tr>
<th>Location</th>
<th>Number and Per Cent Stating Their Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teacher Trainers</td>
</tr>
<tr>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>In the High School Building:</td>
<td>12#</td>
</tr>
<tr>
<td>In the Separate Cottage:</td>
<td>8</td>
</tr>
<tr>
<td>Both locations equally advan-</td>
<td></td>
</tr>
<tr>
<td>tageous:</td>
<td>18</td>
</tr>
<tr>
<td>No single choice indicated:</td>
<td>14</td>
</tr>
<tr>
<td>No comments expressed:</td>
<td>1</td>
</tr>
<tr>
<td>Totals:</td>
<td>53</td>
</tr>
</tbody>
</table>

#The numerals refer to the individuals who stated definitely a preference for one location.
Table 2 shows the number of persons preferring each location and the numbers are interpreted in per-centages of the total number of persons reporting. Forty-two per cent of the educators prefer to have the homemaking department within the main school building. A majority of these educators were city supervisors, Table 2 reveals. Nine per cent of these educators, mostly teacher trainers, prefer to have the homemaking department in a separate cottage. Twenty-eight per cent, half of whom were teacher trainers, consider both locations to be equally advantageous. Some of the questionnaires did not furnish sufficient information to determine the preference of the individual.

**Location of the Homemaking Department**

**Within the High School Building**

An analysis of the judgments of 109 teacher trainers, state supervisors, and city supervisors regarding the location of the homemaking department within the high school building is shown in Table 3.
TABLE 3

Opinions Relative to Locating the Homemaking Department Within the School Building

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT#</td>
</tr>
<tr>
<td>More convenient:</td>
<td></td>
</tr>
<tr>
<td>1. For administrators:</td>
<td>11</td>
</tr>
<tr>
<td>2. For teachers:</td>
<td>17</td>
</tr>
<tr>
<td>3. For pupils:</td>
<td>21</td>
</tr>
<tr>
<td>More an integral part of the school:</td>
<td>29</td>
</tr>
<tr>
<td>Economic advantage:</td>
<td>11</td>
</tr>
<tr>
<td>Depending on:</td>
<td></td>
</tr>
<tr>
<td>1. Location in the building:</td>
<td>15</td>
</tr>
<tr>
<td>2. Physical facilities; Possibility of informality in plant;</td>
<td>10</td>
</tr>
</tbody>
</table>

**TT**-Teacher trainers; SS-State supervisors; CS-City supervisors.

**###**For comments relative to locating the homemaking department within the school building see Appendix, p. 249.

Of the 109 teacher trainers, state supervisors, and city supervisors who indicated their opinions on the questionnaire, Table 2, page 8 shows that 54 believed that the department in the high school is most advantageous. Their numerous reasons for their judgments indicate that it is more convenient; it is more an integral part of the school; and it is more economical, Table 3 explains.

The 73, indicated on Table 3, as believing such a location is more convenient, view the aspect from the standpoint of the administrators, the teachers and the pupils. The department in the high
school is more convenient for the administrators because such a
department can serve larger numbers at one time, they said, and in
a city situation, a cottage would need to be too large. From the
standpoint of routine matters as scheduling classes, bells, attend-
ance records, changing classes and contacting persons in the
department, the location within the building is favored by these
educators.

A few state and city supervisors commented that, when there
are several teachers, it was more conveniently supervised and the
public address system was mentioned. Being located in the building
enabled the home making teacher to teach other classes, which some-
times is an administrative convenience. Supervision of maintenance
of the homemaking department was mentioned. The possibility of
interchanging rooms, both within the homemaking program, as well as
with other courses of the high school curriculum, and the
possibility of exchange classes is facilitated by being within the
main building, according to these leaders. Supervisors noted the
convenience to the administrator of having the department as a
social center in the school.

More than one-third of the teacher trainers, state supervisors,
and city supervisors recognized the location in the building as a
convenience to the teacher, Table 3 shows. The possibility of
interchanging rooms and equipment within the department and with
other courses was considered highly advantageous. A large number
believed that such a location made for less responsibility for the
homemaking teacher in heating and janitorial service and that in other ways it conserved the teacher's time. This seemed important since teachers have numerous other duties to perform in any school system. One teacher trainer felt that a department within a building is more easily supervised by the teacher since the students are more ready to begin working when the period starts.

The comparatively large number, 44.4 per cent, of the 109 persons checking this question, recognized the advantage of the department within the building to the pupils, particularly where weather conditions are unpleasant. It is more accessible to all pupils, less time is lost between classes, and it is easier to go in and work during extra periods, assert these annotators.

The number of teacher trainers, state supervisors, and city supervisors who felt that being in the school building made it more an integral part of the school may be ascertained from Table 3. They do not believe in isolation, and feel that the cottage is apt to widen the breach between homemaking and other education. One teacher trainer stated that segregation would tend to weaken democracy. If the department were located within the school, it could be more a part of the high school curriculum, school and social activities, the school would know more about the work of the homemaking department and the influence of the home economics course would be felt more, they believe.

In their opinion such a location permits all of the school to benefit from homemaking, boys feel more free to use the department,
exhibits can be arranged in the corridors, and it fits more into the daily schedule, thus facilitating the arrangement for exchange classes, if advisable. The teacher mingles more with the other high school teachers and students, and is less apt to feel and be looked upon as a special teacher, according to these homemaking education leaders. They considered, also, that the integration possibilities are greater in using science laboratories and other school rooms, and reversely cooperative where "core" units call heavily on the homemaking teacher and department.

It seems evident from these questionnaires that it is an economic advantage to have the homemaking department located within the high school building as Table 3 indicates. When a new building is being built, the cost of installing home economics is less than to build a separate cottage, they state; and maintenance costs are less, since the heating, lighting, and janitorial services are included with the rest of the building. They recognize that space on the school ground for a cottage is at a premium, being needed for many other things. One supervisor from Delaware comments: "Our schools are small and it would entail additional expense to build a cottage or maintain a house.

The majority of these homemaking education leaders were reticent in making positive statements regarding the most advantageous location, and frequently did so only by qualifying the statement with "it depends." A glance at Table 3 discloses these influencing factors: location in the building, physical facilities, possibility
of informality in the plant, and the teacher.

According to the commentators, the location within the school seems desirable for rural schools, and particularly is this true if the teacher is not above the average in managerial ability. All three groups, teacher trainers, state supervisors, and city supervisors were in accord in their opposition to putting the homemaking department in the basement. They believed that the windows should be above ground level. First or second floors seemed best to most of them, since this facilitated delivery of food and supplies. They recommend an outside entrance to the department and advise all outside rooms. One California supervisor favors locating the homemaking rooms on an inner court. There seemed to be some conflict in their attitudes toward the top floor. A few recommended this in order to protect the rest of the school against odors and noise; another emphatically criticized the top floor location as not being sufficiently "in the center of the school."

There seemed to be a variance of opinion regarding the matter of segregating the department in one section or wing of the building. This seemed advisable as far as unifying the home economics course, but inadvisable if it separated the course from the main current of school life. In this respect, it should be near the center of the building, as it should be the center of the social life of the school, and should be where students pass by, they contend.

Other comments on location were that if there were no other provision for large group meals, the homemaking department should
be near the gymnasium or other large room. If located near the
teacher's lounge, much of the non-educational use of the department
is diverted to the teachers' own quarters.

Desirability of the location for the department within the
school building depends somewhat on the physical facilities available,
Table 3 indicates. Proper lighting, proper ventilation, and proper
heating are essential, they assert. There should be enough space
for modern homemaking rooms, and these rooms should be built to the
same scale as the rooms in a modern home, these educators say.

Table 3 shows the number of persons who believed that the loca-
tion of the department within the main building depended to some
extent on whether the plant could be made sufficiently informal.
They advised that the apartment or suite of rooms helped to gain this
informality.

Only two believed that the location depended on the teacher.
They considered the number of teachers and the courses which they
taught were determining factors. Whether the homemaking teachers
taught other classes influenced the decision, they said.

The individual recommendations and comments, in many
instances, seemed to be even more pertinent than a mere numerical
recording of general tendencies. (See Appendix, p. 249).

A Tennessee teacher trainer comments, "If a majority
of families live in multiple dwellings, it is a more
natural situation to have the homemaking department
arranged in multiple units within the building."

"The location within the school building is most
satisfactory, if the teacher is not above the average in
managerial ability," commented another teacher trainer.
To summarize briefly, then, the opinions of 109 teacher trainers, state supervisors, and city supervisors concerning the location of the homemaking department in the school building, it may be observed that, from the standpoint of convenience, economics, and integration of home economics with general education, such a location is advantageous. Of the total number of 109 persons, 67.0 per cent recognize it as being more convenient for the administration, the teacher, and the pupils. A significant percentage, 52.3, consider that homemaking is more an integral part of the school when housed in the same building; and 27.5 per cent regard such a location as being more economical.

The advantages to be derived from the school building location are dependent upon the location of the department within the building, say 29.4 per cent of these homemaking educators. Many other education leaders would base their decision on the physical facilities which were available in the building, the possibility of informality, and upon the teacher who was in charge of the classes.

Location of the Homemaking Department

Within a Separate Cottage

Of the 128 teacher trainers, state supervisors, and city supervisors who indicated their judgments on the questionnaire, 11 believed the separate cottage to be most advantageous, Table 2, page 8, indicates. The numerous reasons for their choice indicate that: it provides the greatest opportunity for creating a home
atmosphere; instruction tends to be more effective; the pupils see
the home as a whole; desirable standards for homes in the community
may be set up; it may serve as a school and community social
center; it is possible to provide additional space more economically;
and more interest is manifested on the part of pupils and parents."

An analysis of the judgments of 109 teacher trainers, state
supervisors, and city supervisors regarding locating the homemaking
department in a separate cottage is recorded in Table 4.

# Adapted from U.S.D.I. Bulletin No. 181 "Space and Equipment for
Homemaking Instruction" p. 30.
### TABLE 4

Opinions Relative to Locating the Homemaking Department in a Separate Cottage

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT#</td>
</tr>
<tr>
<td><strong>A.</strong> The separate cottage provides the greatest opportunity for creating a home atmosphere:</td>
<td>27</td>
</tr>
<tr>
<td><strong>B.</strong> Instruction tends to be more effective in a separate cottage, because less adaptation is necessary in applying it to home activities:</td>
<td>15</td>
</tr>
<tr>
<td><strong>C.</strong> The separate cottage provides many opportunities for dealing with home problems as a whole:</td>
<td>5</td>
</tr>
<tr>
<td><strong>D.</strong> The separate cottage approximates a home situation in studying different procedures in the care of rooms and use of equipment with view of securing optimum efficiency:</td>
<td>5</td>
</tr>
<tr>
<td><strong>E.</strong> Desirable standards for and by the homes in the community may be set and thus the girls and women may be given concrete suggestions which they will be able to apply in improving their own homes:</td>
<td>4</td>
</tr>
<tr>
<td><strong>F.</strong> Cottages may also serve as school or community social centers, and thus extend the services of the home economics department to the entire school and community:</td>
<td>6</td>
</tr>
<tr>
<td><strong>G.</strong> With a cottage it is possible to provide additional space for homemaking instruction at less cost than would be incurred in extending the main school building:</td>
<td>9</td>
</tr>
</tbody>
</table>
TABLE 4 (Continued)

Opinions Relative to Locating the Homemaking Department in a Separate Cottage

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT#</td>
</tr>
<tr>
<td>H. The pupils and the community tend to take special interest and pride in a home economics department housed in a cottage</td>
<td>5</td>
</tr>
</tbody>
</table>

Depends on: ##

1. Location and plan of the cottage: | 13  | 1  | 5  | 19    |
2. Teacher; Program of the course; Community and local conditions: | 12  | 1  | 3  | 16    |
3. Size of classes: | 1   | 1  | 8  | 10    |
4. Physical facilities; Funds available: | 5   | 5  | .0 | 10    |

#TT-Teacher trainers; SS-State supervisors; CS-City Supervisors.

###For comments relative to locating the homemaking department within a separate cottage see Appendix, p. 249.


A study of Table 4 reveals that 51 homemaking educators believed that the cottage provides the greatest opportunity for creating a home atmosphere. Home atmosphere and home conditions can be more actually reproduced, said 41 of the 109 homemaking educators checking this phase of the questionnaire; and 15 persons believed that the separate cottage is more homelike if it is furnished like
The cottage is more like a home in size and arrangement of rooms; and because of the size, shape and placement, windows and doors lend themselves more to treatment satisfactory in a home, these educators asserted. The exterior and finishes used may be more typically those of a modern home, they stated.

Further study of Table 4 reveals that 33 persons stated that instruction tends to be more effective because less adaptation is necessary in applying it to home activities. Teacher and class have more freedom in making needed changes, since it is devoted to home economics only, remarked several of the homemaking leaders. This location is more advantageous for either unit or problem method, in that it centers on the girls instead of subject matter, and there is opportunity for real living-in for the girls, was pointed out by 7 of the educators. Certain problems can be studied which would not come up in the home economics department in the high school, and the cottage is available for conferences and individual work, the educators believed. One teacher trainer stated that it was easier to assign duties to the girls, and several other persons commented that it was more integrated with homemaking tasks.

Since the cottage presents real life problems, Table 4 reveals that 10 teacher trainers, state supervisors, and city supervisors stated that it provides many opportunities for dealing with home problems as a whole, and girls can see the home as a whole, not as

Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
a school situation or as one unit at a time. Two city supervisors considered that there are more opportunities for home management work, and 8 teacher trainers and state supervisors said that it is more possible to have landscaping problems, attractive surroundings, and flower and vegetable gardens.

The cottage approximates a home situation in studying different procedures in the care of rooms and the use of equipment with view of securing optimum efficiency, Table 4 indicates. There is more opportunity for a diversified program, more homemaking activities are possible, and it is more usable for keeping the house in order, they stated.

If the cottage is similar to many of the homes in the community, these educators believed that desirable standards for the homes in the community could be set and thus the girls and women could be given concrete suggestions which they would be able to apply in improving their own homes, Table 4 shows.

Cottages may also serve as school or community social centers, 12 homemaking educators stated, and thus extend the services of the home economics department to the entire community and school. Since it is more easily heated for extra class activities, it is more usable after school hours for club meetings and hospitality unit, they commented. Adult groups are more attracted to a cottage than to the school building, stated these homemaking education leaders.

Table 4 shows that 17 teacher trainers and state supervisors
believed that it is possible to provide additional space for home-making instruction at less cost than would be incurred in extending the main school building. If only one or a few rooms are needed by a growing school which is too crowded to allow enough room for modern homemaking rooms and equipment, a new cottage might be possible when a new building could not be secured, they believed. In the judgment of the educators, the cottage is a way of getting departments out of small basement rooms, and usually more space can be allowed for homemaking activities. Five teacher trainers and state supervisors stated that this arrangement is more economical, since a cottage and equipment might be purchased for about the same price as the room requirement in a large building.

The pupils and the community tend to take special interest and pride in a home economics department housed in a cottage, stated these commentators; adults are more attracted, as well as the girls, in taking particular pride in the department and its attractiveness.

A majority of the individuals filling out the questionnaire would not make any positive statements regarding the cottage location without the modification, "it depends." According to the thinking of these one hundred and twenty-eight homemaking educators, whether the department can be satisfactorily located in a separate cottage depends on: the size of the classes; the teacher; the program of the homemaking course; location and plan of the cottage; physical facilities and funds available; and the community and
local conditions, Table 4 points out.

The size of the school and the size of the classes are determining factors, they stated, since the cottage could not serve as large numbers as the high school location. Whether the homemaking teacher has any means of contacting other teachers and students, and how she uses the cottage were cited as factors influencing the effectiveness of the cottage. The type of homemaking course taught, and the elasticity of the school program enabling the girls to spend enough time consecutively in the cottage seemed significant factors in using the cottage effectively. The location of the cottage in relation to the school was considered important by 19 of these educators, since it necessarily must be close yet not separated by public corridors. The type of cottage with its provision for sufficient space, lockers for books and wraps, storage space, and equipment for a broad type of training was considered imperative for the success of this plan of location. Arrangements for janitorial service and heating facilities need to be considered, these teacher trainers, state supervisors, and city supervisors declared. Ultimately, it was stated, the amount of money available and the local conditions determined the location of the homemaking department.

Many of the individual comments and recommendations offered on the questionnaire seem valuable in broadening one's understanding of the pros and cons of the separate cottage homemaking department: (See Appendix, p. 249).
Five teacher trainers, state supervisors, and city supervisors considered that "in rural schools a cottage is more desirable."

Four city supervisors commented that "for small schools having only one teacher, the cottage is more desirable."

Five educators agreed: "The cottage requires a teacher who has considerable organizational ability and personality which is adequate to solve possible behavior problems which may arise through group teaching."

"The school program must be closely knit together," remarked one teacher trainer.

"The cottage enables the homemaking department to be more unified," stated a state supervisor.

One teacher trainer and two city supervisors agreed in believing that "the cottage used as a practice house for advanced students was recommendable."

"Most ideal of locations," stated one supervisor.

*Mention was made of some specific difficulties encountered with the use of the cottage. Vandalism seemed to be a problem in some localities, and the home situation is artificial at best, state supervisors pointed out. One teacher trainer asserted that in some cases, the cottage might discourage carry-over of home economics training into the homes from which the girls come.

To summarize briefly the comments of these homemaking educators regarding the location of the homemaking department in a separate cottage, it may be seen that 10.1 per cent of the 109 persons contributing to this study consider the separate cottage preferable to the department located within the school building. Of these 109 persons, 46.3 consider that the separate cottage
provides the greatest opportunity for creating a home-like atmosphere. Considering the effectiveness of instruction, 30.3 per cent consider the separate cottage to be more effective because less adaptation is necessary in applying it to home activities, and 9.2 per cent believe that the separate cottage provides more opportunity for dealing with home problems as a whole; furthermore, 16.5 per cent consider that the cottage approximates a home situation in studying different procedures in the care of rooms and the use of equipment with view of securing optimum efficiency. Desirable standards for and by the homes in the community may be set and thus the girls and women may be given concrete suggestions which they will be able to apply in improving their own homes, say 4.6 per cent of these educators. The value of the cottage as a school or community social center was recognized by 11.0 per cent of the commentators, thus extending the services of the home economics department to the entire school and community. With a cottage, it is possible to provide additional space for homemaking instruction at less cost than would be incurred in extending the main school building, said 15.5 per cent of the homemaking education leaders. The cottage stimulates more pride and interest on the part of pupils and the community, report 7.3 per cent of the teacher trainers, state supervisors, and city supervisors. Factors which must be considered, according to these educators, before a department should be located in a separate cottage are: The size of the classes, the teacher, the homemaking course to be taught, the
location of the cottage, the plan for the house, physical facilities, available funds, the community and local conditions. Such a location was favored for rural schools maintaining only one home-making teacher, but the teacher must have considerable organizational ability and personality in order to handle the possible behavior problems which may arise through group teaching, they asserted. As a practice house for advanced students, the separate cottage was favored by some of these educators.

Homemaking Departments Located in the School Building or in the Separate Cottage Are Equally Advantageous

One third of the homemaking educators responding to the questionnaire considered that both the location within the school building and in a separate cottage were equally advantageous, Table 2, page 8, shows. They stated that both afforded opportunities for homemaking training of equal value, provided sufficient and appropriate equipment and space were available for all types of homemaking experiences at all age levels, for boys and girls, and for men and women. The opinions of the 36 homemaking educators who considered both locations equally advantageous are recorded in Table 5.
TABLE 5

Homemaking Departments Located in the School Building or in the Separate Cottage Are Equally Advantageous

<table>
<thead>
<tr>
<th>Comparisons of Both Locations##</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT##</td>
</tr>
<tr>
<td>Both locations afford opportunity for homemaking training of equal value, provided: adequate space and equipment:</td>
<td>8</td>
</tr>
<tr>
<td>Either may be successful or either may be unsatisfactory; both have advantages and both have disadvantages:</td>
<td>18</td>
</tr>
<tr>
<td>Depends on:</td>
<td></td>
</tr>
<tr>
<td>1. School situation; The location of the department; Physical facilities available:</td>
<td>14</td>
</tr>
<tr>
<td>2. The teacher; How the department is used:</td>
<td>14</td>
</tr>
</tbody>
</table>

Recommendation:

A cottage house may supplement the school department; pupils live in the cottage for a period and take some work in the school department: 0 2 5 7

#TT-Teacher Trainers; SS-State Supervisors; CS-City Supervisors.

##For comments relative to the comparable advantages of the homemaking departments located in the school building or in the separate cottage, see Appendix, p. 249.
Of the 36 persons who regarded both locations as equally advantageous, indicated by Table 2, page 8, 17 stated that both afforded opportunity for homemaking training of equal value, provided sufficient and appropriate equipment was available. The educators considered it necessary to have adequate space for all types of homemaking experiences at all age levels, for boys and girls, and for men and women. They asserted that the physical facilities should provide for living—learning how to live and work together, as well as for hospitality units. The trend of thinking seemed to be that either location may be successful or either may be unsatisfactory; both have advantages and both have disadvantages. Again the location depends on a number of factors: the teacher, the school situation, the location in relation to other classes, physical facilities, the climate and weather conditions, and interest in the community in homemaking education.

Whether either location is successful depends, these leaders said, on the teacher's philosophy and the curriculum which she plans or adapts. Her initiative and adaptability in creating home-like situations for the development of all individuals in her classes, her insight beyond the four walls of the room, her personality and her dependability, were cited as determining factors. Teacher trainers and city supervisors stated that the individual situation determined the choice of location.

The size of the school, the size of the classes, the needs of the individual pupils, and the facilities of the school influenced the choices of many of these educators. The co-operation from
school officials for homemaking, practices in other departments, and the money available determined the advantages of the location in the judgment of several homemaking educators.

Accessibility for class use seemed to be a significant item in the minds of 11 of these commentators. They believed that the department should be where students pass by, and that special attention should be given to ease and convenience for the delivery of groceries, dairy products, and other supplies. One teacher trainer stated that the first floor was advantageous, that the department should have a separate entrance, and that the homemaking rooms should be in a separate corridor so that the odors would not be objectionable to the rest of the school. The arrangement of the rooms claimed the consideration of 9 teacher trainers and state supervisors.

Table 5 shows that two persons considered facilities for lighting, heating and ventilation as important matters for consideration. Three teacher trainers said that climate and weather conditions had some bearing on the location of the department, and two state supervisors commented that the interest of the community in the homemaking program was worthy of consideration.

Seven state and city supervisors recommended supplementing the high school department with a cottage. They advised that pupils be allowed to live in the cottage for a period and take some work in the school department. State and city supervisors mentioned this arrangement as being desirable for large schools or for private
schools. "The more home-like the situation the better the training," commented a city supervisor; "but, both locations might be equally advantageous in a medium size school if every one co-operated."

To summarize the comments of these educators concerning the comparable advantages of the school building and cottage locations, it may be said that both locations afford opportunity for homemaking training of equal value, provided adequate space and equipment are available in either case. Either location may be successful, or either may be unsatisfactory; both have advantages and both have disadvantages. The use of the department, the teacher, the school situation, and the location of the department in relation to the other classes of the school were given much consideration by these education leaders in making their decisions. The high school department supplemented by the cottage practice house was regarded as being advisable by several supervisors.

Other Comments on Location

According to one teacher trainer, a good teacher can be successful in any department. Location is a matter that can be settled only after all factors are considered, asserted two other teacher trainers. Other comments from city supervisors were: "There is no one arrangement which is completely satisfactory;" "The type of course offered determines the type of department;" and, "The type of department should be in line with the community life."
Some of the comments from various state supervisors and teacher trainers throw light in new directions:

A state supervisor may be quoted as saying, "Plan a broad homemaking program, adapted to the schools of various sizes, economic levels, etc., then, plan a plant which will take care of as many as possible of the important aspects of the program."

A teacher trainer commented, "Instructional advantages or disadvantages versus upkeep, cost of floor space, etc., constitute the problem which one must solve."

"I doubt the wisdom of incorporating the home economics department in a vocational building; it strengthens both programs to keep vocational and other education programs together," commented one state supervisor.

Another state supervisor remarked, "Success depends on the teacher rather than on the physical set-up. Good teaching can be done in most any situation; using real home problems and can fit into any school program."

Two supervisors asserted that in some situations home economics and agriculture, or home economics and cafeteria have been combined in a separate building to good advantage. Six other teacher trainers and city supervisors contended that the homemaking department should not be widely separated, since it is advantageous to have all phases of home economics work located together so that there can be an interchange of rooms, equipment, and materials. Climatic conditions, the community to be served, the amount of money available and the homemaking program were mentioned repeatedly in connection with the location of the homemaking department.

Mrs. Lucile Rust, Head, Home Economics Education at Kansas State College, from her broad experience and study of home economics education comes to the following
conclusions concerning the home economics rooms: "They should be as home like as possible; should make possible the carrying on of homemaking activities much as they are done at home; should be in keeping with the economic level of the community; make possible the teaching of a broad course in home economics; be such that good and up-to-date methods and procedures of teaching and learning can be followed."

**Summary of Opinions Concerning the Location of the Homemaking Department**

An analysis of the data relative to locating the homemaking department indicates that the department within the school building is favored by 42.2 per cent of the homemaking education leaders. The cottage is considered most advantageous by 8.6 per cent; however, 28.1 per cent of 109 teacher trainers, state supervisors, and city supervisors believe both locations to be equally useful, depending on the specific situation involved.

The advantages of the department being in the school building are: it is more convenient; it is more an integral part of the school; and it is more economical to build and to maintain, according to these homemaking education leaders. However, they said, much depends on where the department is located within the building, and where the cottage is located with respect to other classes in the school.

The advantages of locating the homemaking department in a separate cottage, according to these 109 homemaking educators, are: the cottage provides the greatest opportunity for creating a home atmosphere; instruction tends to be more effective in a separate cottage, because less adaptation is necessary in applying it to home
activities; the separate cottage provides many opportunities for dealing with home problems as a whole; the cottage approximates a home situation in studying different procedures in the care of rooms and the use of equipment with view of securing optimum efficiency; desirable standards for and by the homes in the community may be set and thus the girls and women may be given concrete suggestions which they will be able to apply in improving their own homes; cottages may also serve as school or community social centers, and thus extend the services of the home economics department to the entire school and community; with the cottage it is possible to provide additional space for homemaking instruction at less cost than would be incurred in extending the main school building; and, the pupils and the community tend to take special interest and pride in a home economics department housed in a cottage. The success of the cottage department depends, to a great extent, they said, on the size of classes, the teacher, the location and plan of the cottage, and the physical facilities and funds available. The separate cottage requires a strong teacher, they believed.

Both locations afford opportunity for homemaking training of equal value, provided adequate space and equipment are available, testified 14.7 per cent of 109 homemaking education leaders. Either location may be successful or either may be unsatisfactory; both have advantages and both have disadvantages, contend 22.9 per cent of these education leaders. However, much depends on the teacher, the school situation, and the location of the department with respect to the rest of the school. The high school department
supplemented by the cottage as a practice house was favored by many of these educators.

According to these homemaking education leaders, there is no one location that is completely satisfactory in any situation, but a good teacher can be successful in any department. They recommend that the broad homemaking program should first be planned in line with the community life, economic level, and the specific school situation, then plan a plant which will take care of as many as possible of the important aspects of the program.

Some comments gleaned from letters accompanying the returned questionnaires speaks, in general, for many of the other educators:

A state supervisor from North Carolina: "Whether the department is in the high school or as a separate cottage depends on the amount of money available, the number of rooms needed for enlargement of school plant, the placement of the cottage in relation to the school grounds, and the interest of the community in the home living program."

A supervisor from Detroit Michigan: "Personally, I feel that the laboratory in the school has a definite place in homemaking education, at least in the large school systems. However, the cottage house, I think, is an ideal set-up for practical and sound homemaking education."
CHAPTER III

TYPES OF ROOM ARRANGEMENTS FOR HOMEMAKING DEPARTMENTS

The matter of determining the most desirable arrangement for the homemaking rooms seems to be even more debatable than that of the location. Throughout the current period of experimentation, the arrangement of the department has had much attention and several different layouts have been tried, with some states deviating widely from the early physical plans which were used. For the purpose of this study, these variations might be grouped under three general classifications. These are: (1) The combination homemaking room in the school building so planned and equipped that all activities for the course may be carried on there; (2) separate laboratories in the school building, one for clothing construction and other related activities, and one for foods; (3) various combinations of rooms and laboratories.

Of the 128 questionnaires received from teacher trainers, state supervisors, and city supervisors, representing forty-eight different states and Hawaii, 114 chose to express their beliefs on the section regarding types of room arrangements for homemaking departments. The comments contributed were first considered from a bird's-eye viewpoint of the complete concept expressed by a summary of the remarks relative to each of the six suggested layouts and any additional remarks under the seventh part—other types.

It was interesting to note the points of emphasis which seasoned the remarks of individuals concerning any arrangement of rooms.
Some tendencies seemed evident, but more generally there seemed to be numerous individual reactions. Quite obviously the person's philosophy of homemaking, itself, and the educating for homemaking, color any comments which they make.

In general, the trend was in opposition to specialization in the secondary school, and in favor of a philosophy of homemaking which recognizes home economics in all of its diversity of activities. There is a fear expressed of departmentalizing homemaking and of glorifying the cooking and sewing aspects. In this respect much concern was expressed regarding the teacher's attitude toward homemaking, and her ability and training for educating for family life.

More and more evidence springs forth that homemaking educators are conscious of the activities of boys and girls outside of the school room. The relationship of the school homemaking rooms to the situation to be found in churches and grange halls was mentioned. Individual needs of the pupils and the matter of individualizing instruction prompted many to their decisions. Democratic procedures and the solution of individual problems were objectives foremost in the minds of many.

Teacher trainers seemed particularly interested in providing a desirable teaching and learning environment for the specific situation. State supervisors, especially, were concerned with the varying abilities of teachers, and of the type of instruction being given. The actual situation within the school was not minimized.
City supervisors, in particular, were influenced by the details of school organization in their respective systems. Problems prevalent when large classes must be handled, the availability of space and other physical facilities, and the funds allotted for building and operating departments were pertinent factors considered. The necessity of fitting home economics into the school program advisedly was taken into consideration.

**JUDGMENTS OF HOMEMAKING EDUCATORS CONCERNING ARRANGEMENTS FOR HOMEMAKING DEPARTMENTS**

Of the 128 questionnaires received from teacher trainers, state supervisors, and city supervisors, 114 expressed some attitude regarding types of room arrangements for homemaking departments. An analysis of the comments is shown in Table 6.
## TABLE 6

Judgments of Homemaking Educators Concerning Arrangements for Homemaking Departments

<table>
<thead>
<tr>
<th>Types of Arrangements</th>
<th>Number and Per Cent Stating Their Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teacher</td>
</tr>
<tr>
<td>1. Combination; sufficient space and equipment for all pupils to do the same activity at the same time:</td>
<td>3#</td>
</tr>
<tr>
<td>2. Combination: Providing only for rotation of activities:</td>
<td>10</td>
</tr>
<tr>
<td>3. Separate rooms for food and clothing:</td>
<td>0</td>
</tr>
<tr>
<td>4. Separate rooms for food, clothing and dining room:</td>
<td>0</td>
</tr>
<tr>
<td>5. Separate rooms for food, clothing, and a living room which could be used for dining:</td>
<td>6</td>
</tr>
<tr>
<td>6. Separate rooms for food, clothing, and an apartment:</td>
<td>3</td>
</tr>
<tr>
<td>No single choice indicated:</td>
<td>21</td>
</tr>
<tr>
<td>Questionnaires not checked:</td>
<td>3</td>
</tr>
<tr>
<td>Totals:</td>
<td>53</td>
</tr>
</tbody>
</table>

#The numerals refer to the individuals who stated definitely a preference for one arrangement.

###See explanation of "Other types" later in this chapter.
Table 6 shows the number of persons preferring each type of arrangement and the numbers are interpreted in percentages of the total number of persons reporting. Many persons, 46.9 per cent, did not specify any single choice, so the percentage favoring a single arrangement is small in each case.

Thirteen per cent, a majority of whom were teacher trainers, prefer the combination room which provides for rotation of activities. Ten per cent, mostly city supervisors, favor the separate rooms for foods and clothing plus an apartment. Ten per cent, half of whom were teacher trainers, recommend some particular plan which they described under "other types." These individual plans are discussed later in this chapter. Eight persons, six being teacher trainers, advised the separate rooms for foods and clothing, and a living room which could be used for dining. Seven persons preferred the combination room which provides sufficient space and equipment for all pupils to do the same activity at the same time.

No one recommended the separate rooms for foods and clothing plus the dining room, and only a single city supervisor preferred having just the separate rooms for food and clothing work.

**Combination Homemaking Room or Rooms Providing Adequate Space and Equipment for Each Member of the Class to Carry on The Same Type of Activity at the Same Time**

A survey of the reactions of 99 teacher trainers, state supervisors, and city supervisors to the homemaking department being
arranged in a combination room which provides adequate space and
equipment for each class member to carry on the same type of activity
at the same time is shown in Table 7.

TABLE 7

Judgments Concerning the Combination Homemaking Room
Or Rooms Which Provide Adequate Space and Equipment for Each
Member of the Class to Carry on the Same Type of Activity at
The Same Time

<table>
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</thead>
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<tr>
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</table>

Advantageous:
1. For the teacher; For the school: 8 7 5 20
2. Because this provides more training and experience for each individual: 7 5 5 17

Disadvantageous:
1. Because such a plan presupposes regimentation: 12 5 2 19
2. Such a plan is not economical: 4 4 1 9

Depending on:
1. The school: 6 6 6 18
2. The teacher: 4 5 3 12
3. Economic situation; Methods used; The community: 5 1 2 8

TT-Teacher trainers; SS-State supervisors; CS-City supervisors.

For comments relative to this combination homemaking room see
Appendix, p. 250.
Scrutinizing Table 7, one finds that of the total number of 99 persons represented by the information, 54 approve of this arrangement, while 37 persons disapprove. Eight persons were not convinced that any one arrangement was more advantageous than the others.

The number of teacher trainers, state supervisors, and city supervisors who believed it advantageous because it provided more training for each individual can be ascertained from Table 7. They assert that this arrangement allows space for activities where all members of a group could work simultaneously on similar activities or equally well on various activities. They maintained that there are times when all members of a class should have space to do a single activity at the same time, since it is not always possible to integrate the homemaking program and most teachers plan to have the class carry out similar activities during some class periods. Such an arrangement, they said, is more adequate for teaching basic principles, and several believed this to be especially important in junior high school groups.

The combination homemaking room which provides adequate space and equipment for each member of the class to carry on the same type of activity at the same time lends itself to group rotation, as well, they stated. Individual problems or meal basis planning may still be carried on, and the elasticity of such a room eliminates necessity for teaching all by one method, commented these educators. If

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#Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
necessary, cooking and sewing could proceed at the same time; and, three persons considered this combination room more home-like.

Eight persons regarded this particular combination arrangement as advantageous for the teacher. These educators stated that, for the average teacher, and particularly when there is only one teacher, supervision is less difficult. The school too, they said, finds advantages in such a layout; since it is compact and requires less space, it is convenient for the small school or the average school. Others asserted that this plan is better adapted to the short class periods; it is more convenient for large classes; and it is desirable when several classes must be in session at the same time.

Usually these annotators did not make a positive statement without qualifying the remark with "depending on." Table 7 discloses that some of the factors on which the arrangement must depend are: the teacher, the methods which are used, the school, the economic situation, and the community. The number and abilities of the teachers, they stated, determine the advisability of such a plan. The educational philosophy of the school, whether the school program is arranged with this idea in mind, available space, and the size of the school and class groups, all are deciding factors, according to these teacher trainers, state supervisors, and city supervisors. The only reference made to the economic situation was relative to the number and ability of the teachers which could be afforded.

The references to methods were from teacher trainers particularly.
They judged this combination plan to be satisfactory depending on whether the unit method was used; whether the meal approach was used; and whether home activities prevailed most of the time. The degree of integration within the homemaking program and the objectives of the course were listed as significant influences. For mature persons who wished to practice the skills for wage earning, they recommended this combination arrangement.

The community was not ignored. One teacher trainer considered the educational philosophy of the community, and two city supervisors declared that the size of the community regulated their choices.

A perusal of the disadvantages recorded in Table 7 gives evidence that some of these educators believed that such a plan of arrangement presupposes regimentation. They contended that it is not flexible enough to be in keeping with their philosophy of homemaking; that it does not lend itself to homemaking as an integrated whole; and that there is too little opportunity for group or individual teaching. They considered it unnecessary and often undesirable for homemaking to be so formal that all pupils should be doing the same thing at the same time. They opposed the plan saying it provided for the old type method of education where everyone does the same thing, and few, if any, lessons demand the cooking of the same food by each class member. Each individual pupil has different needs at different times, some asserted. Some of these commentators declared this arrangement was destructive to democratic procedures and the solution of individual problems.
Table 7 makes reference to a dependence on the methods used. Some of these leaders believed that such a plan limited the methods which might be used.

Some of these homemaking educators consider this plan to be an unnatural situation which is not sufficiently homelike. The room has to be too large, otherwise a crowded condition existed, they said.

Economically it is disadvantageous, they stated. It is too expensive an investment; the cost of equipment and operation is high; and waste space results which will not be used all of the time, were the reasons given for their opinions.

Recognizing and respecting the opinions of the 99 homemaking education leaders, it seems of value to consider some pertinent recommendations which sift from their heterogeneous comments: (See Appendix, p. 250.

Teacher trainers recommend that such a room must be carefully planned, and should facilitate, when desirable, a combination of methods. One room with as many different homemaking activities as possible was encouraged by one teacher trainer. It would not be imperative that all pupils in the class be able to cook at the same time, but enough so all could be working in the same area.

City supervisors recommended that if there are several class rooms in the school, one might be used as this type. However, they would recommend an adjoining living-dining room. They too, recommended that there be facilities for all to work in the same area, and recognized some advantages for groups to be able to work together.

A San Jose, California, supervisor commented, "We have one such room and find it very satisfactory for junior high schools where classes are small and where
there are no boys included in the classes." The Delaware state supervisor considered it "entirely adequate for our classes." Another state supervisor may be quoted: "Teachers are young and not able to carry the supervision and direction of children doing many different activities at once."

In general summary, then, these 99 homemaking educators do not unanimously endorse the combination room which provides adequate space and equipment for each class member to carry on the same type of activity at the same time. More than 54.5 per cent do approve of this arrangement with qualifications, but 37.5 per cent of these leaders do not approve of the arrangement for numerous reasons. The main advantages pointed out by the endorsers indicate that such an arrangement provides more training and experience for each individual pupil, since it allows ample space for activities where all members of the group are doing either similar activities or different activities. Furthermore, they believe it is advantageous for the school as it is compact and requires less space than some other plans. Those persons who approved the plan recognized the dependence of the success of such a plan on the teacher in charge and the philosophy and organization of the school.

The chief criticism from those persons disapproving of such a plan was that, in their opinion, it presupposed regimentation and encouraged methods of teaching which did not recognize individual needs and personalities. Furthermore, they stated, such a plan is not economical.
Combination Homemaking Room or Rooms Providing Only Space and Equipment for Rotation of Activities

A study of the reactions of 110 teacher trainers, state supervisors, and city supervisors to the homemaking department being arranged in a combination homemaking room or rooms providing only space and equipment for rotation of activities is recorded in Table 8.
TABLE 8

Judgments Concerning the Combination Homemaking Room or Rooms Providing Only Space and Equipment for Rotation of Activities

<table>
<thead>
<tr>
<th>Opinions##</th>
<th>Number of Times Given by</th>
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</table>

Advantageous because:

1. Most satisfactory for the teaching of homemaking on a group or individual basis:
   - 12  2  3  17

2. More economical:
   - 8  4  0  12

3. More normal home situation:
   - 7  2  1  10

Disadvantageous because:

1. Most teachers are not skilled enough to carry on several major activities at one time such as foods and clothing so that maximum learning occurs:
   - 16  7  4  27

2. Not best learning situation:
   - 9  4  4  17

3. Not suitable for many schools; many communities not ready for this:
   - 6  2  5  13

4. Difficult to supervise:
   - 9  3  4  16

Depends on:

1. The school:
   - 11  6  13  30

2. The teacher:
   - 9  12  7  28

3. Homemaking course; Methods used:
   - 3  1  5  9

## TT-Teacher trainers; SS-State Supervisors; CS-City supervisors.
## For comments relative to this combination homemaking room see Appendix, p. 250.
It will be seen by reference to Table 8 that of the total of 110 homemaking educators represented by the data, 63 approve of the combination arrangement which provides only sufficient space and equipment for rotation of activities, while 37 persons disapprove. Ten persons did not contribute sufficient information to enable the investigator to determine whether they endorsed or disapproved of the plan. In 18 cases this section of the questionnaire was not filled out.

The reasons given by the 25 teacher trainers, 20 state supervisors, and 18 city supervisors indicated on Table 8 as approving the arrangement, signify that it is the most satisfactory for the teaching of homemaking on a group or individual basis. Since it does not provoke a stereotype course, such an arrangement is more useful in teaching by the problem method, they stated. Individualized activity is encouraged, and the work is based on the needs of the pupils, according to findings of this study. Individual needs will vary, so the pupils need to be doing different things at different times, contend several teacher trainers. Other education leaders assert that there is value in assuming responsibility since it encourages co-operation, resourcefulness, dependability, and appreciation of time. Since a variety of homemaking activities is possible, there are more opportunities for integrating phases of homemaking, commented several teacher trainers and city supervisors. One teacher trainer recognized such an arrangement as being typical of the situation to be found in churches and grange halls. Another teacher trainer considered the combination room providing only for
rotation to be more conducive to democratic procedures and the solution of individual problems.1/

Table 8 bears evidence that 10 per cent of these educators regard the combination room as being a more normal home situation. The rooms appear more homelike, and home problems and projects are promoted, said these trainers and supervisors of homemaking teachers. Since families work under similar circumstances, the pupils experience, more nearly, homemaking as a whole concept.

Teacher trainers in particular, considered such an arrangement as being a desirable teaching environment. They believed that supervision was facilitated since the teacher can supervise several activities at one time, and she can have contact with more pupils at one time. Two persons testified that pupils are more interested in such a physical arrangement in which to study. They consider that with space and equipment for rotation of activities, sufficient facilities are available.

A glance at Table 8 shows that 12 teacher trainers and state supervisors believed this combination room arrangement to be economical of funds, space and equipment. Teacher trainers said that it was less expensive and, therefore, advantageous when incomes are limited. They considered that maximum use of space and equipment was achieved where space and equipment were limited or where the classes were large.

That the success of such an arrangement is dependent upon the

1/ Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
teacher is evidenced by Table 8. Usable for one teacher only, and depending on her training, experience, and resourcefulness, these education leaders recommend this plan. Furthermore, they specify that the teacher must be able to organize and check pupils' progress when rotating activities and she must be guided by a broad philosophy of family life education. One city supervisor recommended that the "young, energetic teacher who likes to experiment," be placed in such arrangements.

Much depends on the school, said 30 of these educators. General conditions, the size of the classes, and the length of the periods influence the usability of this room, teacher trainers and supervisors contend. The school program must be arranged for this and an informal organization is essential, they assert. The problem method was encouraged with pupils planning over a period of days and evaluating their progress frequently under teacher guidance.

The community was cited as being contributive or otherwise influential in the success of the combination plan. One city supervisor believed that this plan needed an intelligent group of students. The majority considered that small classes were more satisfactory but a few thought that the combination room was preferable for large classes. One city supervisor recommended the plan for George-Dean classes or for older college groups.

To consider, now, the 33.7 per cent who disapproved of the combination room providing for rotation of activities only, the facts represented by Table 8 show that most teachers are not skilled enough to carry on several major activities at one time as foods and
clothing, so that maximum learning occurs. Such a set-up requires skilled, competent, superior teachers with managerial ability, stated these educators. Since the present turnover does not allow for experienced teachers, many are young, average, or weak, and this plan was considered difficult for the beginning teacher. One teacher trainer believed several instructors were necessary to be able to use this combination room effectively. Supervisors stated that teachers are not trained for using such a room.

It may be seen by Table 8 that homemaking education leaders regard the combination room disadvantageous for many schools since it necessitates small classes with one teacher. City supervisors regarded such an arrangement inadvisable in systems where the same teacher does not head both foods and clothing work. Communities are not ready for this plan, some supervisors said.

Of the 17 persons who considered this layout detrimental to the best learning situation, many believed that it limited the methods which were usable since frequently it was advisable to let all members of the class do the same thing in order to develop skills and techniques and have effective discussions. One teacher trainer regarded the combination room as having an unnatural atmosphere. Children waste time, state supervisors stated, and there is distraction when groups are doing different activities.

Those educators who regarded such a plan difficult to supervise said that orderly teaching plans were difficult and confusion resulted from too many kinds of activities in a small space, particularly with large classes. City supervisors said that the space was too
limited and such a plan did not permit mixed classes.

Further consideration of some comments relative to this combination room may broaden the perspective of persons interested in arrangements for homemaking rooms: (See Appendix, p. 250.)

Some comments contributed by teacher trainers were: "This combination is theoretically good;" "I have laboratories of this kind and I believe in the possibilities of this;" "Our teacher education and preservice training will have to change to prepare teachers to work efficiently in this type of plan;" "Both teachers and pupils enjoy this;" "The only excuse I can see for this is that one teacher in a small school would have the chance to teach more comprehensive program;" "Teachers who use it recommend it from the standpoint of economy of equipment;" "This arrangement is not justifiable unless lack of space or funds make it impossible to have anything else;" "If all are working in the same area, foods for instance, this would be all right;" "I would never plan a laboratory in which a whole class could not do the same thing at the same time;" and, "I would prepare an arrangement where if one wished they could use a combination of methods rather than just one procedure."

State supervisors testified: "This method is used in most of our homemaking classrooms in Hawaii;" "This arrangement has proved most satisfactory of any arrangement in South Dakota;" and, "We plan such a department to suit each situation."

City supervisors may be quoted in saying: "This plan is more satisfactory for one-teacher departments than the combination providing for each pupil to work individually;" "I believe this is good and probably what home economics will result in within a few years;" "For small departments this combination might be economical but not ideal;" Concord, New Hampshire—"We are using such equipment and feel it is fairly successful if classes are not too large;" "We would like to select a room of this description for use in our 9th grade classes. The training which is done in this course is preliminary to the training which would be done in the practice house later;" "Better results from this plan if children are older—college age groups;" "In elementary schools we have some laboratories where pupils carry on different types of activities at the same time. The room is arranged for
clothing in one end and for foods in the other;"
"I feel that the gain in integration is more than off-
set by waste and duplication of time and effort;"
and, "The combination room is not good for mixed
classes."

From the judgments expressed by 110 teacher trainers, state
supervisors, and city supervisors regarding the combination home-
making room or rooms which provide only sufficient space and
equipment for rotation of activities, one may note that 57.3
persons approve of the plan, while 33.6 other persons do not
endorse such an arrangement. Those leaders who sanction the plan
believe that, since it is useful in teaching by the problem method
of instruction, it is most satisfactory for the teaching of home-
making on a group or individual basis. It is a more normal home
situation, and it is economical, they contend. However, much
depends on the teacher, the school, the course, and the methods
used, they assert.

Some of the reasons given by those disapproving of the layout
were that most teachers are not skilled enough to carry on several
major activities at one time such as foods and clothing so that
maximum learning occurs, and the present turnover of teachers does
not allow for experienced teachers. It is limited to certain schools,
they believe, since the plan necessitates small classes and one
teacher. It is not flexible for the best learning situation since
methods are limited, and it is confusing for the students, they say.
Furthermore, those persons who oppose the plan regard it as difficult
to supervise, and many communities are not ready for this, these
oppositionists maintain.
Separate Rooms for Foods and Clothing

A survey of the reactions of 111 teacher trainers, state supervisors, and city supervisors to the homemaking department being arranged in two separate rooms for foods and clothing is shown in Table 9.

TABLE 9

Judgments Concerning the Homemaking Department Which Provides Separate Rooms for Foods and Clothing

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<thead>
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<th>Attitudes##</th>
<th>Number of Times Given by</th>
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Advantageous for:
1. Teacher; Administrators: 11 14 16 41
2. Learning environment; Using best methods of teaching: 11 3 9 23
3. Miscellaneous uses of the rooms; Appearance of the room: 3 2 5 10

Disadvantageous:
1. For up-to-date methods of teaching; For flexibility of rooms; For efficient use of space and equipment: 17 3 2 22
2. For the teacher; Economically: 9 3 1 13

Depending on:
1. The school: 5 12 19 36
2. Character of the rooms; Use of these rooms; Physical facilities: 3 3 4 10

#TT-Teacher trainers; SS-State supervisors; CS-City supervisors.
##For comments relative to the homemaking department which provides separate rooms for foods and clothing see Appendix, p. 250.
From Table 9 it is apparent that, with 42 per cent in favor of and 58 per cent opposed to, the teacher trainers do not swing conclusively to endorsing the two laboratory department for homemaking. The state supervisors are somewhat more biased, with 70 per cent favoring and 30 per cent opposing. That the city supervisors approve this plan is shown by the Table indicating 92 per cent approving as compared to 8 per cent opposing such an arrangement.

Thirty-nine persons consider this arrangement advantageous for the teacher. These homemaking education leaders say that, if there are more teachers than one, and the periods are short, this is the easiest set-up for the homemaking teachers. Particularly is this true, they say, if the classes are large. One teacher trainer believed that housekeeping is made easier when there are two rooms; and a state supervisor, as well as a city supervisor, indicated that better results from teaching are obtainable. In one instance where foods and clothing were under two different supervisors, the city supervisor considered that the two-room plan was necessary. Eighteen per cent of the teacher trainers considered this plan advantageous for the teacher. It is interesting to note that one teacher trainer considered this arrangement advantageous for the administrator and that was in the instance of scheduling classes.

It seems from numbers indicated in Table 9 that the teacher trainers and city supervisors considered the arrangement to be more closely related to the methods used in teaching than do the state supervisors. They believed that it was an advantage to be able to
have different types of work going on at the same time, and pupils in the same class might be doing different things. These same two groups indicated that such an arrangement facilitated working with small groups and they noted that equipment could serve more than one class at a time. If there was a reason for using the unit method of teaching, that is, basing all teaching around foods and clothing with laboratory work stressed, the separate room arrangement would be desirable, commented one teacher trainer.

Eight persons, mostly city supervisors, believed that the miscellaneous uses to which the rooms were put, determined, to some degree, the advantages to be gained. Either for junior high school classes or for advanced work, the separate rooms were recommended. One teacher trainer advised that two rooms facilitated the storage of materials. One state supervisor commented that when the homemaking department is used for school lunch, separate rooms are advantageous, and a teacher trainer recognized the possibility of using the clothing room for a social room. Two persons considered the rooms to be more attractive when foods and clothing were separated.

Thirteen persons approve of the separate room arrangement as providing a desirable learning environment. The two types of activities, foods and clothing, do not lend themselves to one room, several persons contended, with the comment that "few families sew in the kitchen." Delicate fabrics might be soiled and clothing is apt to absorb the food odors, say these homemaking educators. They believe that the different environments are stimulating to the students, and that the same equipment does not meet the needs of both foods and
clothing. One person stated that it was an advantage for pupils to be able to work extra periods in one laboratory without disturbing a class in session.

Whether the separate rooms for foods and clothing are advisable depends on several factors, according to these 129 homemaking education leaders. It will be seen by Table 9 that the school, use and character of rooms, and the physical facilities influence the choice of arrangement.

Three teacher trainers felt that the number of teachers, and whether more than one teacher needs to use the equipment simultaneously affected the advisability of the separate room arrangement.

A noticeable percentage, particularly of city supervisors, consider the school to be a determining factor. Whether the school is large enough to warrant two rooms, the number of classes per day, and the needs of the school were cited as significant factors.

The table shows that a few regarded the character and use of the rooms noteworthy. It will depend on the flexibility of the rooms, and the floor space allotted, whether some of the educators would approve of the separate rooms. If equipment and function of the rooms vary widely, and the home atmosphere prevails, a number of the teacher trainers asserted that they could approve the arrangement. A few persons, three in all, mentioned that the desirability of having separate rooms was dependent on whether both rooms could be used all of the time.

Table 9 lists physical facilities as a determining factor. Two persons contended that whether space and facilities were meager or
at a premium affected one's choice. One city supervisor believed that the advantage of such an arrangement is dependent on the availability of funds.

Continued study of Table 9 reveals that many disadvantages were pointed out by these educators. Seven persons considered this arrangement disadvantageous for the teacher, stating that such a plan could not be supervised adequately by a single teacher.

For up-to-date methods of teaching, trainers of teachers, in particular, considered that two separate rooms for foods and clothing were unwise. They contend that such an arrangement does not lend itself to the problem method of teaching and that it is not conducive to teaching individual problems. They advocate a variety of homemaking activities in one room as being more desirable. One teacher trainer believed that specialization is not as desirable in the secondary schools as a general homemaking course. If composite courses are taught, said a teacher trainer, one room is better. With the two room plan there is a tendency to departmentalize and over emphasize foods and clothing, said several teacher trainers and state supervisors. These leaders who oppose the two room plan declare that such a plan increases segregation of subject matter principles and creates a feeling that foods and clothing represent all of homemaking.

A few persons question the flexibility of such rooms. They state that it is not as homelike a situation, and it does not present a true picture of the homemaking program. They advocate flexible furniture, preferably movable, arranged in one room.
Reference is made in Table 9 to the efficient use of space and equipment. Teacher trainers believed that such an arrangement requires more space and equipment, much of which is wasted. Economically this arrangement is disadvantageous stated six teacher trainers. They consider it to be too expensive for the benefits derived.

Recognizing and respecting the opinions of these 111 homemaking education leaders, it seems of value to consider some pertinent recommendations which sift from their heterogeneous comments: (See Appendix, p. 250.)

Teacher trainers recommend that this arrangement can be made to function with the right teacher if unit kitchens and dining rooms are available and if the equipment is movable. More than foods and clothing should be taught, and the home atmosphere should prevail. In the foods room there should be space for serving, and in the clothing room there should be a nook fixed up for a living center.

A teacher trainer and a state supervisor agree that an informal living center should supplement.

A city supervisor recommends that in the junior high school situation there should be but one room.

In summarization of the opinions expressed regarding the separate rooms for foods and clothing, it may be said that 72.1 homemaking education leaders approve of the separate room arrangement, stating that the arrangement is most advantageous for the teacher, for using the best methods of teaching, and for providing a desirable learning environment. Of the 111 educators contributing to this study, 28.0 per cent of them do not endorse the arrangement mainly because they do not feel that it is conducive to up-to-date methods of teaching. In their opinion the plan places undue
emphasis on the foods and clothing aspects of homemaking.

The greatest single factor influencing the decisions of these experienced leaders was the school situation. Whether the school is large enough to warrant two rooms, the number of classes per day to accommodate, and the needs of the school were cited as significant factors.

In general, these educators believed that more than just foods and clothing should be taught, and the home atmosphere should prevail.

Separate Rooms for Foods, Clothing, and Dining Room

Ninety-eight of the 129 persons returning their questionnaires expressed their opinion concerning this section. More than one opinion was stated by certain educators. A comprehensive study of the reactions of these 98 education leaders to the homemaking department being arranged in separate rooms for foods, clothing, and dining room resulted in the data recorded in Table 10.
### TABLE 10

Judgments Concerning the Homemaking Department Which Provides Separate Rooms for Foods, Clothing, and Dining Room

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<td>Totals:</td>
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Advantageous for:

1. Serving broader purpose; Convenience: 7 3 11 21

Disadvantageous:

1. For efficient use of space and equipment: 8 4 3 15
2. Economically: 8 4 3 15
3. For up-to-date methods of teaching; Supervision: 5 3 1 9

Depending on:

1. The school; Economic situation: 4 1 9 14
2. The teacher; The administrators: 4 3 2 9
3. Use of dining room; other dining possibilities available; Physical facilities: 5 2 5 12

#TT-Teacher trainers; CC-City supervisors; CS-City supervisors.

##For comments relative to the homemaking department which provides separate rooms for foods, clothing, and dining room see Appendix, p. 250.
The information recorded in Table 10 makes it difficult to draw any definite conclusions regarding the advisability of having a separate dining room since, of the 98 who answered this question, 50 endorsed the plan, 45 opposed and 3 persons did not give sufficient information to determine what their opinion was. A study of some of the reasons given for their opinions is enlightening.

To consider first those educators who approved of the separate dining room, it may be noted on Table 10 that they believed that it served a broader purpose than do just the separate rooms for foods and clothing. Teacher trainers and city supervisors stated that a dining room provides opportunity for experiences not possible in foods laboratories. It is a more homelike situation for most people, they assert, since a meal can be served in a more home-like situation. One teacher trainer emphasized the point that so many homes do not provide a dining room that the school with a dining room has a splendid opportunity to teach the young people something about the formalities of eating which they do not get in many homes.

Teacher trainers and city supervisors believed that the separate dining room gave more freedom in the use of the rooms. City supervisors declared that the dining room was desirable in giving extra interest to students, and particularly suited for advanced work.

Other purposes served by the dining room, in the opinion of these educators, were: it may be used for special occasions such as teas and luncheons; it provides pleasanter surroundings for entertaining; and "dining and living centers are always desirable in a school building and take up a small amount of space."
In addition to serving broader purposes, these leaders considered that the extra dining room is a convenience, as it saves the work of rearrangement.

A number of factors determine the advisability of a dining room, said these trainers and supervisors of homemaking teachers. The findings indicate these factors to be: the number of teachers employed; administration—the method used in scheduling classes; the homemaking course taught—whether elective or vocational, and the extent of advanced training offered; the use of the dining room—whether it was used sufficiently to justify the extra cost; whether the foods room or other rooms provided facilities for serving meals; the amount of floor space allowed for the department and the flexibility of the equipment; the economic situation; and the size of the school. A dining room can be justified only if it is used every time food is prepared, and if the equipment and functions of the room vary widely, they contended. Sizes of classes must warrant the extra room and equipment, declared these homemaking education leaders.

Nearly as many persons opposed the separate dining room, 45 in all, as Table 10 reveals. Some of the reasons given for their stand deserve attention. In the first place, they believe that the dining room is, in most cases, an extravagance, since it is too little used for the cost, and so much space and equipment is wasted. They believe that the serving conveniences are more effective in the foods laboratory, because better management may be taught if meal service units are near the food preparation. Some provision, such as table
and chairs near the preparation center for daily eating is more useful than the separate dining room, they maintained, and serving centers may be provided for every student in this way.

The same criticism, that it is not conducive for teaching individual problems, was applied to the arrangement under consideration as was applied to the separate laboratory plan. They stated that this arrangement still did not provide for as integrated a program as does the one-room department, because it still emphasizes foods and clothing and makes it difficult to handle other phases of homemaking. Furthermore, these oppositionists charged that the plan was too difficult from the standpoint of supervision.

Some of the recommendations and individual comments forthcoming from these experienced directors serve to broaden the vision of the less experienced student of homemaking departments: (See Appendix, p. 250.)

"Meal service facilities should be available with each preparation unit" said teacher trainers and state supervisors.

Teacher trainers recommended: "The location and size of the dining room should be carefully planned so that it will be used enough to justify the cost;" "One room is more economical and efficient in small schools with one homemaking teacher;" "Need living quarters as well as dining;" "Clothing laboratory can serve for large group meals."

State supervisors recommended: "A combination living-dining room can be used more often and also serve as a social center;" "It would be better to have larger rooms for foods and clothing."

One city supervisor advised: "The dining room should be separated by partitions, if not in a separate room which would be more advisable," and a state supervisor asserted: "Dining facilities should be in a separate area if all in
one room.

Some pertinent comments were: To quote a teacher trainer, "Living center can be used as a dining center," and city supervisors said, "A good teacher can make a dining room work hard;" "Dining room should be much used;" "A dining room is desirable. My opinion is that too many people eat in the kitchen now-a-days and young people need to become familiar with some of the formalities attendant upon dining room service."

To summarize, then, the reactions of 98 teacher trainers, state supervisors, and city supervisors relative to the homemaking department which provides separate rooms for foods, clothing, and a dining room it is evident that they are fairly evenly divided in their attitudes toward the arrangement, with 51.0 per cent endorsing the plan and 45.7 rejecting the plan. Those persons who approved, stated that, with the added dining room, the department could serve broader purposes than it could with just the foods and clothing rooms, particularly in the matter of training in some of the formalities of dining room service and for entertaining. Those persons who disapproved stated that serving centers for each preparation center in the kitchen served more pupils and were more convenient, and that a dining room is not used enough to justify the expense of the room.

Both the oppositionists and the endorsers of the separate dining room plan agreed that much depended on the teacher, the school situation, the other facilities for serving provided in the department, and particularly on how the dining room was used.
Separate Rooms for Foods, Clothing and a Living Room That Could Be Used for Dining

One hundred and three teacher trainers, state supervisors, and city supervisors chose to express their opinions relative to this section of the questionnaire. An analysis of the comments of the 103 educators resulted in the data recorded in Table 11.
TABLE 11

Judgments Concerning the Homemaking Department Which Provides Separate Rooms for Foods, Clothing and a Living Room That Could Be Used for Dining

<table>
<thead>
<tr>
<th>Attitudes##</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT#</td>
</tr>
<tr>
<td>Approve:</td>
<td>35</td>
</tr>
<tr>
<td>Disapprove:</td>
<td>11</td>
</tr>
<tr>
<td>No opinion stated:</td>
<td>0</td>
</tr>
<tr>
<td>Questionnaire not answered:</td>
<td>8</td>
</tr>
<tr>
<td>Totals:</td>
<td>54</td>
</tr>
</tbody>
</table>

Advantageous for:

1. Serving broader purpose
   2. Economically:
      
Disadvantageous:

1. For up-to-date methods of teaching;
   For supervision:

2. Economically; Space; Expense:

Depending on:

1. The school; Physical facilities;
   Economic situation:

2. The teacher:

3. The character of the living room;
   Use to which the living room is put:

#TT-Teacher trainers; SS-State supervisors; CS-City supervisors.

##For comments relative to the homemaking department which provides separate rooms for foods, clothing and a living room that could be used for dining see Appendix, p. 251.
The reactions of 103 homemaking educators to the homemaking department providing a clothing, foods, and a living room which could be used for dining is shown in Table 11. It is evident that this arrangement meets with much more favor than did the separate dining room arrangement, with 83.5 per cent of the 103 persons approving the living room, and 14.6 per cent opposing the plan. Only one state supervisor was so undecided that no definite opinion was stated.

All 86 persons who endorsed the plan said that it served a broader purpose than does the dining room. They believed that the living room was better for an integrated program since more adequate and attractive arrangements for teaching could be made, and since there was adequate space, more variety of activities would be encouraged. They stated that the living room provides more opportunities than does the dining room alone. Some of the purposes cited were: home living units, cleaning, recitation, bedroom, playroom, homemaking library, dining, clothing, social activities, group and club meetings and faculty lunch room. "Table service can be carried on in the living room or in some other way," commented one teacher trainer.

Seventeen persons believed that the living room presented a more home-like situation, considering that many homes have this plan, and the room gives added opportunity for home decoration and home improvement. One teacher trainer endorsed this plan for cases where schools cannot provide a real homemaking living room in an apartment or a cottage.

Sixteen educators considered the living room economically
justified in space, equipment, and expense. They stated that it conserved space since it made better use of the space than does the separate dining room. They regarded it as less expensive because the cost of equipping is less than for an apartment and the room replaces the apartment, and, because it is more usable than the dining room, the expense can be more easily justified, asserted teacher trainers.

Characteristically, these experienced leaders recognized many factors on which the success of such a room depends. Table II suggests these as: the number of teachers; space and funds available; size and organization of the school, the extent to which the living room is used; and the character of the living room. They believed that the room should be planned for use, with movable furniture characteristic of that found in the community. The equipment and function of the room should vary widely, and the room should be made available for the whole school, these commentators maintained. Either laboratory should be available for any class, and the living room should be used constantly, asserted several trainers and supervisors of homemaking teachers. "If used for serving every foods lesson, for discussions in groups, and for conferences;" "If individualized instruction is used and the girls can use the rooms they need when they need them" commented two teacher trainers. One teacher trainer would approve of the living room plan only if meal service was carried on infrequently. City and state supervisors recognized that the living room would be a valuable addition in systems where foods and clothing were under the supervision of
different teachers. Teacher trainers regarded it essential to have other meal service units available in addition to the living room.

Eleven teacher trainers and four state supervisors did not approve of the added living room with the separate foods and clothing rooms, Table 11 shows. The main reasons for their opposition were that even this arrangement is too limited in scope of activities, and in their estimation this amount of space and expense could not be justified for one teacher. The rooms are not flexible enough, therefore not conducive to teaching individual problems, they assert, the two laboratory plan still increases segregation of subject matter principles. They add that such a plan cannot be adequately supervised by a single teacher.

Some of the recommendations and comments relative to the two laboratory and living room plan are thought-provoking. (See Appendix, p. 251.)

Teacher trainers and state supervisors recommend:

- The living room should be made available for the whole school.
- Equipment and function of living room should vary widely.
- Should be able to use either laboratory for any class.
- Furniture should be movable.
- Additional tables for meal service should be provided in the foods room in connection with kitchen units.
- One big room and a social room in place of the living room.
- Living room should be flexible enough to be converted into a bedroom.
- The living-dining room should be equipped to be used for social purposes.
- Having a combination room providing for rotation of activities available too.
If a separate room, a living-dining room would provide the home situation better. One room is more economical and efficient in small schools having one homemaking teacher.

City supervisors advise:
With a roll-away, in-a-door bed, this room can be used to demonstrate bed-making.

Some comments forthcoming from teacher trainers were:
"I do not think it is necessary to have separate rooms for foods and clothing, but not objectionable if pupils can get to either when desired."
"We have this arrangement (foods, clothing, and living room used for dining) and think it is fine."
"I would prefer a living room to a dining room and separate rooms for foods and clothing."

City supervisors said:
"One school in a very poor district in Minnesota has room for foods, clothing, and a living-dining-bedroom combination."
"We have this arrangement and like it."
"Living room should be for use."

With 83.5 per cent favoring and 14.6 per cent of the 103 persons disapproving it may be assumed that this plan which has the living room in addition to the foods and clothing laboratories has proved satisfactory in many instances. The points in favor of this plan appear to be that it serves a broader purpose since it is more adaptable to many activities and may be used for a wide variety of activities. They believe it is more home-like than the dining room. Homemaking educators consider that they can justify the cost in space and money because the room serves many purposes. The use of the living room depends on the teacher, space and funds available, the school situation, and the uses to which the room is put, as well as the character of the living room.
Disadvantages which were cited for the plan were still in reference to the two-room laboratory, in that they are too limited in the scope of activities possible. They assert that the laboratories are not conducive to teaching individual problems and they increase the segregation of subject matter principles. They regard the arrangement as too expensive for the benefits to be derived from it.

Separate Rooms for Foods, Clothing, and an Apartment Consisting of Living Room, Bedroom, Dining Center, Kitchen, and Bathroom

An analysis of the attitudes of 104 teacher trainers, state supervisors, and city supervisors concerning separate rooms for foods, clothing, and an apartment resulted in the data recorded in Table 12.
### TABLE 12

Judgments Concerning the Homemaking Department Which Provided Separate Rooms for Foods, Clothing, and an Apartment

<table>
<thead>
<tr>
<th>Attitudes##</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT##</td>
</tr>
<tr>
<td>Approve:</td>
<td>27</td>
</tr>
<tr>
<td>Disapprove:</td>
<td>15</td>
</tr>
<tr>
<td>No opinion indicated:</td>
<td>1</td>
</tr>
<tr>
<td>Did not answer this item on the questionnaire:</td>
<td>11</td>
</tr>
</tbody>
</table>

**Totals:**
54 33 42 129

Desirable because:
1. Serves broader purposes:
   | TT## | SS | CS | Totals |
   | 10   | 5  | 7  |  22    |

Disapprove because:
1. Is not economical; Space; Expense:
   | TT## | SS | CS | Totals |
   | 10   | 7  | 10 |  27    |
2. Difficult to plan for desirable use; Housekeeping load too heavy:
   | TT## | SS | CS | Totals |
   |  7   | 3  |  9 |  19    |

Depending on:
1. The school; Economic situation; Money; Space; Time:
   | TT## | SS | CS | Totals |
   | 20   | 7  | 8  |  35    |
2. The teacher; Methods Used:
   | TT## | SS | CS | Totals |
   |  9   | 4  | 4  |  17    |
3. Use to which the apartment is put; Character of the apartment:
   | TT## | SS | CS | Totals |
   |  7   | 8  | 8  |  23    |

#TT-Teacher trainers; SS-State supervisors; CS-City supervisors.
##For comments relative to the homemaking department which provides separate rooms for foods, clothing, and an apartment see Appendix, p. 251.
Reference to Table 12 shows that 64.1 per cent of the teacher
trainers, state supervisors, and city supervisors approve of the home-
making department comprised of a foods room, a clothing room, and an
apartment, while 34.0 per cent of these leaders disapprove. Four
persons were too undecided in their minds to stand for or opposed
to the arrangement. The reasons given for approving the arrangement
were mainly that they believed that such an arrangement served more
purposes, since it recognizes homemaking activities represent a wide
range rather than just foods and clothing. "Excellent set-up for
teaching, practicing and research in all phases of homemaking,"
commented 4 teacher trainers and city supervisors. One teacher
trainer and one state supervisor commented, "Better than just the two
laboratories and a living room." Seven teacher trainers and city
supervisors stated that the apartment was desirable for homemaking
activities such as home management and home decoration, and provided
the greatest opportunity for creating a real home atmosphere. They
believed that the rooms should be spacious enough to be useful for
instructional purposes which permitted more formal teaching, as
demonstrations and drill. The more equipment available, the greater
the chance to give wide experiences, said one state supervisor, and
the apartment makes for more usefulness of equipment. A teacher
trainer considered that the apartment provided opportunity for
creativeness. A city supervisor believed that the teacher could
supervise large classes in the laboratory while permitting a few
girls to use the adjoining apartment, while other supervisors stated
that the apartment was especially good for upper-classmen.
The value of the apartment depended on several factors, contended these homemaking educators. The number of teachers and whether they were trained to use this type of arrangement influenced the usefulness of the apartment, according to 14 educators. The size of the school, the location, and the flexibility of the schedules were considered before many of the leaders made their decisions. Sixteen persons considered that the school would need to be large enough to warrant the space, while two stated that an apartment would be advisable only in a small department. One teacher trainer did not think that the apartment was advisable in rural localities. The apartment calls for a flexible schedule which can be adjusted to the best use of the apartment, remarked two city supervisors. Other factors of the school which were given consideration were: the length of the periods, the organization, and the program. Teacher trainers and state supervisors considered the amount of space and the money which was available, the equipment possible, and if time in class warranted such an arrangement.

The use to which the apartment is put was regarded by 19 persons to be a determining factor, Table 12 indicates. If teachers and pupils use all of the rooms most of the time, and know how to get the best results from the apartment, ten teacher trainers and city supervisors would approve of the plan. Other stipulations mentioned were: if the pupils could use any laboratory for any class; if groups of girls could live in the apartment for a period; and, if homemaking was taught rather than foods and clothing. One teacher trainer, two state supervisors, and one city supervisor considered the character of the
apartment to be significant. Teacher trainers and state supervisors believed that the cottage plan should be used in the apartment, and that it should be homelike. One city supervisor stated that a variety of activities should be possible at any one time, and one state supervisor commented that the rooms should be spacious enough to be useful for instructional purposes.

As to the methods which these educators considered advisable for such a plan, one state supervisor stated that homemaking, rather than foods and clothing, should be taught. One city supervisor approved the plan "if a variety of activities could be carried on at one time." A teacher trainer recommended that the unit method be used when there are two teachers.

Three teacher trainers and city supervisors believed that the advisability of the two laboratories supplemented by an apartment plan depended on whether the needs of the students warranted so much room and if the plan met the needs of the students in the department.

As Table 12 shows, 35 homemaking educators objected to the homemaking department comprised of a foods room, a clothing room, and an apartment. Eight of these persons believed that the apartment was not sufficiently advantageous, since the same experiences could be provided by the two laboratory plan with the living room which could be used for dining. A city supervisor stated that there was little need for the extra kitchen provided by the apartment.

Table 12 indicates that it was difficult to plan for effective use of the apartment. Reasons for this attitude suggest that apartments are not used enough. Bedrooms are seldom used, bathrooms are
not used enough to warrant, and generally the apartment is not used for homemaking centers, according to these experienced supervisors and trainers of homemaking teachers. The apartment was criticized by teacher trainers and city supervisors as being too small for more than small groups. "Students do not see the possibilities," remarked a teacher trainer, and a state supervisor believed the apartment to be too difficult to supervise. Teacher trainers and state supervisors stated that such an arrangement puts foods and clothing work in a setting which is not a part of real home life, a criticism, apparently, of the two laboratory plan.

Twenty-seven homemaking education leaders disapproved the plan because they did not consider it economical. Since so much space was not always in use, they would not justify this amount of space being allotted to homemaking in this way. Since they considered the plan expensive for the benefits received, they did not consider the apartment practical in small schools. Two teacher trainers and one city supervisor criticized the apartment as presenting a problem in housekeeping.

Further insight into the opinions of these experienced leaders may be gained by a perusal of the recommendations and comments gathered from the questionnaires. (See Appendix, P. 251.)

The teacher trainers who approved of the plan recommended:

Plans must be made to utilize all space to a maximum degree, and to teach an integrated program.

The entire department should be homelike.

State supervisors who approved of the plan made the following recommendations:
Rooms should be connected so that they can be thrown en suite.

With a small group the kitchen should be included in a combination foods and clothing room and have the living room which could be used for dining.

City supervisors who approved of the plan under consideration recommended:

Living room should be large enough for conducting discussions with large classes and for social affairs.

Dining center and kitchen could be omitted if room for foods provided suitable opportunities.

A state supervisor commented: "An apartment that is closed except when visitors come is of little value."

City supervisors commented:

"Teachers must know how to use an apartment so it will not be a show place and a dust catcher."

"A living-dining area is more desirable."

"We hope to convert our apartment into an arrangement whereby the living room can be used for committees and social groups in the school."

To summarize the opinions of 104 homemaking education leaders concerning the homemaking department providing for foods laboratory, clothing laboratory, and an apartment, it may be noted that 63.5 per cent of them endorse the plan while 33.7 per cent disapprove. The main reason given by those approving the plan was that, in their opinion, the apartment served broader purposes and provided for a wider variety of activities. Those persons who opposed the arrangement considered that the apartment is too expensive for the benefits to be derived. Too much space and expense is involved and the result is not advantageous enough to warrant it, they declared. Furthermore,
they believed that the apartment involved a heavy housekeeping load.

In the opinion of the 104 educators, the desirability of the apartment in addition to the two laboratories depended on the school to a large extent, the teacher to a notable degree, and the use to which the apartment was put. The economic situation, to many, constituted a determining factor; and a few persons believed that the character of the apartment, the methods used, and the needs of the pupils should determine the arrangement to be used.

**Other Types**

In order to allow an opportunity for the commentators to express their beliefs freely without being curtailed by a suggested arrangement, space was allowed in this section for any comments or suggestions of types other than the six mentioned arrangements. Some of the comments contributed, broaden the perspective of the student of arrangements for homemaking departments. (See Appendix, p. 251.)

Teacher trainers from various training centers stated:

San Jose, California—"I do not disapprove of any of these suggestions. Any one could be worked to good advantage if the teacher was resourceful, energetic, and of an experimental turn of mind."

University of Nebraska—"The real homemaking teacher with a fine philosophy can develop pupils and attain worthwhile objectives regardless of type of department. The combination rooms would lend themselves better, however."

Cornell University—"For one teacher, supervising problems are easier in one room. One large room with two home kitchens at one end and a living-clothing center at the other could accommodate twenty pupils on rotation basis with one group
preparing food, one group planning food, and another group studying foods. This also could accommodate all children sewing or carrying on other homemaking activities at the same time.

For two teachers, I would have a living-clothing center and a kitchen center with several home kitchens. For three teachers, I would recommend a living room center, a clothing center, and a foods center."

University of Tennessee--"Combination laboratory where school has only one teacher with equipment enough for three or four groups to be using at the same time."

"Use of one large room for combination laboratory to be used for foods and clothing seems desirable. An apartment providing for living center, dining center, bedroom and bath connected with the laboratory makes provision for all other homemaking activities."

University of West Virginia--"Combination room with facilities available for family group work in all phases of homemaking. Foods room, living-dining area may or may not include space for clothing."

University of Washington--"A combination room where a gradual transition to the home might be made."

New Mexico State College--"Should provide equipment and room for more than one activity at a time."

Oklahoma A. and M. College--"Plan for rotation of equipment."

State supervisors representing 9 different states expressed the following thoughts:

Honolulu, Territory of Hawaii--"The combination room providing for rotation of activities is used in most of our schools. In addition to such an arrangement, some of our schools have an apartment or a cottage."

New York--"I feel that it is difficult to answer some of the questions or even comment on them because our conditions vary in this state, it depends on the school and other conditions. For some of the smaller schools, we recommend a plan which is a general homemaking room where all activities in homemaking are going on in this one room. For medium sized schools we recommend the two room centers where we could have two teachers and our kitchens arranged a little bit differently from the unit kitchens arranged for the smaller plans. When it comes to the larger schools we recommend much more
space as then, of course, we might have separate rooms for foods and clothing. We do not recommend separate foods and clothing rooms when we have limited space....and we do not recommend that we have separate foods and clothing rooms unless we have other living space, as living-dining room or a complete apartment."

Wyoming—"The types must be determined by the size of classes, activities of the girls, standard of living in the community, amount of money available, scope of the course and other factors."

City supervisors representing several of the cities throughout the United States expressed varying opinions.

South Bend, Indiana—"I have had to reduce floor space and I think, with the great increases in high school enrollment, probably other teachers have had to do the same. At present we serve all needs in the laboratory."

Providence, Rhode Island—"This depends entirely upon the administration, the number to be accommodated at a given time, and floor space which can be allotted a given number. I would rather have largest possible number of students have the greatest variety of homemaking experiences possible. I also feel that we should use home economics work to teach girls (or boys) to work together on home tasks, so I favor arrangements that call for group work—with group decisions and rotation of duties."

San Jose, California—"The most used room in our whole city is a room for laundering in a junior high school. It serves as a class room, on occasion, for boys home economics and can be transformed by use of screens into the most attractive of rooms for a tea or bridge luncheon. All furniture is movable. Tubs, four sets, and a three-burner stove are against walls. Large drying room easily accommodated furniture not used and laundering equipment."

Kalamazoo, Michigan—"A combination laboratory which may be converted into a room for faculty meetings, P. T. A. meetings, mothers' meetings is often desirable in smaller or consolidated schools."
Grand Rapids, Michigan—"I believe if the teacher has the philosophy that she is teaching homemaking rather than foods, clothing, etc., that types suggested—foods room, clothing room, and apartment—and the combination room which provides sufficient equipment and space for each pupil to work at once can be so planned that they will provide as much training for homemaking plus the development of much better skill and technique."

**Summary of Opinions Concerning the**

**Types of Room Arrangements for Homemaking**

**Departments**

An analysis of the data relative to the types of room arrangements for homemaking departments shows that a majority of the educators, 46.9 per cent, did not believe that they could choose any one type as being superior for all situations. The largest percentage stating a preference considered the combination room providing for rotation of activities to be most satisfactory, 13.4 per cent favoring. The plan of a foods room, a clothing room, and an apartment was the next choice, with 10.9 per cent preferring it. The two-laboratory-apartment layout was preferred by eight persons, and seven educators chose the combination room providing sufficient space and equipment for each pupil to do the same activity at one time. Only one person preferred the two-laboratory plan and no one favored the two-laboratory-dining room plan.

Of the 99 homemaking education leaders who commented on the

1/Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
combination room which provides adequate space and equipment for each class member to carry on the same type of activity at the same time, 54.5 per cent approve of the arrangement with qualifications, but 37.5 per cent do not approve of the arrangement for numerous reasons. The main advantages pointed out by the endorsers indicate that such an arrangement provides more training and experience for each individual pupil, since it allows ample space for activities where all members of the group are doing either similar activities or different activities. Furthermore, they believe it is advantageous for the school as it is compact and requires less space than some other plans. Those persons who approved the plan recognized the dependence of the success of such a plan on the teacher in charge and the philosophy and organization of the school.

The chief criticism among those persons disapproving of the combination room which provides adequate space and equipment for each class member to carry on the same type of activity at the same time was that, in their opinion it presupposed regimentation and encouraged methods of teaching which did not recognize individual needs and personalities. Unnecessary space and equipment constitute unjustifiable expense, they asserted.

From the judgments expressed by 110 teacher trainers, state supervisors, and city supervisors regarding the combination homemaking room or rooms which provide only sufficient space and equipment for rotation of activities, one may note that 57.3 persons approve of the plan, while 33.6 other persons do not endorse such an arrangement. Those leaders who sanction the plan believe that it is most
satisfactory for teaching by the problem method of instruction. It is a more normal home situation, and it is economical, they contend. However, much depends on the teacher, the school, the course, and the methods used, they assert.

Some of the reasons given by those disapproving of the layout which provides only for rotation of activities were that most teachers are not skilled enough to carry on several major activities at one time such as foods and clothing so that maximum learning occurs, and the present turnover of teachers does not allow for experienced teachers. It is limited to certain schools, they believe, since the plan necessitates small classes and one teacher. It is not flexible enough for the best learning situation since methods are limited, and it is confusing for the students, they stated. Moreover, those persons who oppose the plan regard it as difficult to supervise, and many communities are not ready for this, they maintain.

In summarization of the opinions expressed regarding the separate rooms for foods and clothing, it may be said that 72.1 home-making education leaders approve of the separate room arrangement, stating that the arrangement is most advantageous for the teacher, for using the best methods of teaching and for providing a desirable learning environment. Of the 111 educators contributing to this study, 28.0 per cent of them do not endorse the arrangement mainly because they do not feel that it is conducive to up-to-date methods of teaching. In their opinion, the plan places undue emphasis on the foods and clothing aspects of homemaking.

The greatest single factor influencing the decisions of these
experienced leaders relative to the two-laboratory plan was the school situation. Whether the school is large enough to warrant two rooms, the number of classes per day to accommodate, and the needs of the school were cited as significant factors.

In general, these educators believed that more than just foods and clothing should be taught, and that the home atmosphere should prevail.

To summarize the reactions of 98 teacher trainers, state supervisors, and city supervisors relative to the homemaking department which provides separate rooms for foods, clothing, and a dining room, it is evident that they are fairly evenly divided in their attitudes toward the arrangement, with 51.0 per cent endorsing the plan and 45.7 per cent rejecting. Those persons who approved stated that, with the added dining room the department could serve broader purposes than it could with just the foods and clothing rooms, particularly in the matter of training in some of the formalities of dining room service and for entertaining. Those persons who disapproved, stated that serving centers for each preparation center in the kitchen served more pupils and was more convenient, and a dining room is not used enough to justify the expense of the room.

Both the oppositionists and the endorsers of the separate dining room plan agreed that much depended on the teacher, the school situation, the other facilities for serving which are provided in the department, and particularly on how the dining room was used.

With 83.5 per cent favoring and 14.6 per cent of the 103 persons disapproving, it may be assumed that the plan which has the living
room in addition to the foods and clothing laboratories has proved satisfactory in many instances. The points in favor of this plan indicate that it serves a broader purpose than the dining room, since it is more adaptable to many activities and may be used for a wide variety of activities, and it is more homelike than the dining room. Homemaking educators consider that they can justify the cost in space and money because the room serves many purposes. The use of the living room depends on the teacher, space and funds available, the school situation, and the uses to which the room is put, as well as the character of the living room.

Disadvantages which were cited for the plan were still in reference to the two-room laboratory, in that they are too limited in the scope of activities possible. Many persons asserted that the laboratories are not conducive to teaching individual problems and they increase the segregation of subject matter principles. These leaders regarded the arrangement as too expensive for the benefits to be derived from it.

To summarize the opinions of 104 homemaking education leaders concerning the homemaking department providing for foods laboratory, clothing laboratory, and an apartment, it may be noted that 63.5 per cent of them endorse the plan while 33.7 per cent disapprove. The main reason given by those approving the plan was that, in their opinion, the apartment serves broader purposes and provides for a wide variety of activities. Those persons who opposed the arrangement considered that the apartment is too expensive for the benefits to be derived. Too much space and expense is involved and the result
is not advantageous enough to warrant it, they declared. Furthermore, they believed that the apartment involves a heavy housekeeping load.

In the opinion of the 104 educators, the desirability of the apartment in addition to the two laboratories depended on the school to a large extent, the teacher to some degree, and to the use to which the apartment is put. The economic situation, to many, constituted a determining factor; and a few persons believed that the character of the apartment, the methods used, and the needs of the pupils should determine the arrangement to be used.

Many of these trainers and supervisors of homemaking teachers considered the six accepted plans suggested on the questionnaire as faulty and suggested plans which seemed best irrespective of convention. Other persons considered the physical plan or arrangement to be so dependent on the teacher, the school, and the course, that they declined to evaluate the layouts objectively.
CHAPTER IV

ARRANGEMENTS FOR SERVING MEALS

Considering the significant relationship of serving meals to any plan for teaching, it was decided by the investigators to determine what the trend of thought of these homemaking educators was regarding arrangements for serving. One part of the questionnaire was devoted to this investigation. Several arrangements for serving meals were suggested, after which ample space was allowed for the evaluators to indicate their approval or disapproval, accompanied with the reason for their decision and the conditions affecting their choice.

OPINIONS RELATIVE TO ARRANGEMENTS FOR SERVING MEALS

One hundred twenty-four teacher trainers, state supervisors, and city supervisors commented on the section of the investigation which treated the question of serving facilities. It seemed significant to determine whether certain arrangements were especially satisfactory, so the responses on the questionnaires were analyzed and all cases where persons indicated their approval for the arrangement are recorded in Table 13.
TABLE 13

Approved Arrangements for Serving Meals

<table>
<thead>
<tr>
<th>Arrangement</th>
<th>Number# and Per Cent## Approving</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teacher</td>
</tr>
<tr>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>Small tables provided for each unit kitchen or desk:</td>
<td>45</td>
</tr>
<tr>
<td>Corner or end of laboratory or homemaking room arranged as a dining center:</td>
<td>24</td>
</tr>
<tr>
<td>Separate dining room:</td>
<td>14</td>
</tr>
<tr>
<td>Both small tables and separate dining room:</td>
<td>27</td>
</tr>
<tr>
<td>Living room which can be used for dining:</td>
<td>49</td>
</tr>
</tbody>
</table>

#The numerals refer to the individuals who stated their approval for the arrangement.
##Percentages are based on the total number of persons who stated either approval or disapproval of the arrangement.

Sixty-nine per cent of the 124 homemaking educators did not consider any one arrangement to be especially desirable for all situations. Many persons stated that combinations of small tables and living-dining areas would be desirable, while others considered that
too many factors entered into making a decision. A comment contributed by a teacher trainer expresses the judgment of several of the homemaking education leaders: "Any of the suggested arrangements are good when the situation can manage such an arrangement;" or, as a state supervisor remarked, "Any one of these situations may be used. I would make additions when community income level indicated that such additions were advisable." The following discussions of the six suggested provisions for serving will assist in an evaluation of the arrangements.

**Small Tables Provided for Each Unit Kitchen or Unit Desk**

Reference to Table 13 shows that the plan of providing small tables for each unit kitchen or unit desk is approved by 97.2 per cent of the 110 homemaking education leaders who participated in this phase of the study. Three persons, one from each group of teacher trainers, state supervisors, and city supervisors, disapproved of the plan. There was little indecision on the part of these educators, as is evidenced by the fact that only three persons were so undecided about the plan that they could not make a definite statement concerning the small tables with each unit.

Two teacher trainers and one state supervisor believed that the small tables with each unit kitchen and unit desk were a "minimum essential if social values are to be recognized." Sixty-one and eight-tenths per cent of the annotators consider that the small tables offer a desirable teaching arrangement, since they provide a place for serving the food which is prepared. Thirty-four homemaking
education leaders stated that the small tables with each unit presents a more typical home situation because the meals are often served in the kitchen or breakfast nook at home. Other homelike characteristics mentioned of this plan were that it approaches a family situation in size of servings, size of groups, and conversationally. Pupils understand home conditions, they asserted, since family size groups prepare and serve together.

Thirty-two persons considered that it was of value to have serving as a part of the preparation of the food, and is necessary if foods work is studied on the meal basis, in order to carry to completion the family meal. These leaders believed that such a plan promotes more frequent preparation and serving of meals by the entire class, since serving for every foods lesson, even with one dish meals, is facilitated. With each group having facilities available, serving is not regarded as an activity or something used only for special occasions.

Fourteen teacher trainers and supervisors recognized that every one in the class has an opportunity to gain experience in serving, since several meals may be served at once by the various preparation groups, and large classes can be accommodated at one time. One city supervisor believed that the small tables with each unit "makes for individual work." Eight trainers and supervisors of homemaking teachers believed that such a convenient arrangement of serving facilities encouraged better management on the part of the pupils.

Fifteen persons regarded the small tables as economical of time, space and energy. The plan is advantageous with one hour periods,
compact and economical of space, and conserving of steps, they testified.

Twenty-six homemaking educators considered the plan convenient for both teachers and pupils. It is convenient for the teacher because it is easily supervised, saves confusion, accommodates large numbers of pupils, and the tables may be moved elsewhere for other uses, explained twelve commentators. It is convenient for pupils, they verified, because each group may have their own center conveniently located, tables may be used for food preparation, and they can get more supervision. One teacher trainer stated that the small tables are "convenient for small high schools."

It must not be assumed that these experienced leaders considered the small tables as ideal regardless of conditions. They believed that the effectiveness of such a plan depended on whether the situation could manage such an arrangement in light of the size of the room; whether the kitchen was arranged in unit kitchens, and the number of units; whether another living area was available; and the method of teaching which is used.

It is interesting to note the reasons given by the three persons who disapproved the plan for serving which provides small tables and chairs for each unit. One teacher trainer regarded it as too expensive. A teacher trainer and a city supervisor believed that so many serving centers are unnecessary when working on individual problems. A state supervisor believed that the plan limited the methods usable and she objected to the emphasis which it placed on
eating in the kitchen.\footnote{Original tables showing complete data on file in Home Economics Education Office, Oregon State College.}

Some of the recommendations and personal comments growing out of the rich experiences of these leaders may assist the reader to realize more fully the possible advantages and problems connected with having small tables with each preparation unit. (See Appendix, p. 251.)

One teacher trainer recommended that the room be arranged so that it has as normal a home appearance as is possible without sacrificing time because of steps necessary for laboratory work.

State supervisors expressed other individual opinions: "This arrangement provides for teaching foods on a meal planning basis. It provides for development of individual skill management and working with a group." "Not as homelike or utilitarian as a corner of the foods room or a living-dining area."

City supervisors expressed many interesting impressions of the plan: "I like this plan best if tables can be put together frequently and the entire group join together for tasting products." "Promotes conversation. More nearly a family group."

One hundred ten homemaking educators approve almost unanimously of the small tables provided with each unit kitchen or unit desk. Their reasons for favoring the plan indicate that the tables provide a desirable teaching arrangement. Social values may be recognized, the family situation is exemplified, serving can be taught as a part of meal preparation, and every one in the class may have an opportunity to gain experience in serving. Furthermore, they believe that better management may be taught. Another merit of the plan which was
recognized by the educators is that it is economical of time, space, and energy. According to the commentators on this study, the plan is convenient for both teachers and pupils. However, the annotators believed that the situation, the kitchen arrangement, and the methods used determined the effectiveness of the plan.

The three persons who disapproved of the small table plan stated that it is too expensive for the benefits to be derived, since so many tables and chairs are not necessary for the problem method of study; it is not utilitarian; and too much emphasis is placed on eating in the kitchen.

Corner or End of Laboratory or Homemaking Room Arranged as a Dining Center

One hundred one teacher trainers, state supervisors, and city supervisors expressed their impressions relative to using a corner or end of the homemaking room or laboratory for a dining center. The tendency seems in favor of the plan, with 59 persons approving, Table 13 shows, and 36 persons disapproving of such an arrangement. Six homemaking leaders did not feel qualified to state a preference.

Among those persons who approved the plan, 19 considered that the plan was an economical way of providing an area for serving when no other plan was possible. In this way, they believed a nicer service for meals could be provided, and one unit could always use the serving center. Ten homemaking educators stated that such an arrangement provided for other activities in one room such as social activities, entertaining, and privacy in the service of meals.
Fifteen homemaking education leaders considered the arrangement to be more convenient than separate rooms, particularly for one-room departments or all-purpose rooms. Two teacher trainers asserted that the plan was desirable for larger schools, since it accommodated larger groups of pupils. These leaders stated that the plan was convenient for the teacher because it is easily supervised, is good for bringing groups together, and is convenient for demonstrations. One city supervisor believed that the corner or end of the laboratory arranged as a dining center was especially desirable in rooms equipped with unit desks.

Various factors influenced the thinking of these educators and determined the decisions of many of them. The location was a matter which several persons considered. Whether the center adjoined unit kitchens and whether privacy could be afforded influenced teacher trainers in their endorsement of the plan. The uses which the room served, the space allowed, and the space or other rooms available for other areas of work must be considered, declared eight state supervisors and city supervisors. Teacher trainers and city supervisors stated that the specific situation, the time allowed in class, and the size of the classes and of the entire school affected their decision. Two teacher trainers maintained that the methods which were used in instruction would determine the value of the plan. A city supervisor said that the degree of attractiveness of the center would influence her opinion.

The main reasons expressed by the educators who disapproved the plan were: in their belief the arrangement is difficult to adapt to
purposes since it provides for only part of the class at one time and affords little opportunity for management. It is not economical of steps, time, and space, since too much time is lost in carrying things to and from the center, they believed. The space may be little used, they asserted. The critics of this arrangement considered it disadvantageous for the teacher. In their opinion the arrangement increased confusion in serving meals and conflicted with the rest of the class that would not be using the center. Four persons judged the plan to be unhomelike.1/

Some of the recommendations and comments which sifted from the questionnaire may lead to greater understanding of the value of such a provision for serving. (See Appendix, p. 252.)

Teacher trainers had the following to say:

"Separate dining room preferable. Should not exclude separate tables."

"Probably a combination of the small tables at each unit plus the corner or end of the laboratory or homemaking room."

"For serving and eating in every food preparation lesson. If used for small group discussions, and committee work."

"Good, although time and effort is lost in walking back and forth. Opportunity for teaching better management with such a problem."

"This can be good with small classes."

1/Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
State supervisors recommended:

"Should be in addition to small tables."

"Should be large enough to hold several small tables."

"Not if this means no tables for the units. A dining-living area has more uses."

It may be concluded that the corner or end of the homemaking room or laboratory arranged as a dining center has many advantages as well as some disadvantages. With 59 per cent of 101 homemaking education leaders approving and 35.6 per cent disapproving, it may be assumed that the plan needs careful study. Many leaders consider that it is an economical way of providing a serving area for class work when no other plan is possible, and it also provides for other activities in one room. It is convenient in one-room departments and accommodates larger groups at one time, they assert. Furthermore, the arrangement is more convenient for the teacher to use and supervise than is a separate room, several persons stated. Some of the factors on which the value of such an arrangement depended, according to these educators, were: the location in relation to the unit kitchens; the space allowed or other rooms available for other areas; the uses the room served; the size of classes; the attractiveness of the center; the methods used; and the time allowed in class.

Disadvantages of the plan, these experienced leaders pointed out, are that it is difficult to adapt to many purposes, and it is not economical of steps, time, and space. According to these commentators, the plan is to be criticized because it provides for only part of the
class at one time and affords little opportunity for management of
time and effort. Moreover, they believe that it increases confusion
in serving meals and conflicts with the rest of the class not using
the center.

Separate Dining Room:

According to 98 homemaking education leaders, the vote is against
the separate dining room as is shown on Table 13 with 41.1 per cent
of them endorsing the plan. Fifty-seven per cent rejected the
separate dining room plan. Three persons did not state specifically
that they favored or disapproved of the plan. Thirty-one persons
made no comment relative to the suggested provision for serving.

The reasons given by some persons who approved of the separate
dining room were that they believed the room provided a more attrac-
tive home setting and it is utilitarian. For setting standards and
for social functions, the attractiveness of the dining room is an
asset, according to 11 persons. Such a room may be used for pupils
doing out of class experiments, for variations in equipment, for rota-
tion of groups, and for accommodating large groups, stated 15 home-
making education leaders.

The value of the separate dining room depends on several factors,
asserted many of these educators. The community, its pattern of
living, and what the children have in their homes; if the room is used
sufficiently to justify the additional expense; the funds and space
available; the needs and size of the school; and the location of the
dining room in relation to the preparation units influenced the
effectiveness of such a room.

Those persons who voted down the plan considered that such a room is unnecessary because other rooms provide more usable space. They considered the dining room to be impractical since so few pupils could be served at once, it is expensive, it encourages inefficient management of time and steps, and is generally used too little for the cost in space, equipment, and expense. Furthermore, stated three teacher trainers, the room is too formal to be a typical home setting in many homes. Teacher trainers and state supervisors believed the room to be a difficult problem for teachers both in supervision and teaching environment. The purposes which the room served seemed to be the deciding factor, and some persons thought that the room could be made very purposeful if used for discussion groups, serving, group work, and class activities.1/

Some of the comments and recommendations volunteered by these commentators aid in broadening one's vision concerning the potentialities and problems of the separate dining room. (See Appendix, p. 252)

Teacher trainers recommended that:

"A home kitchen should be directly connected with this dining room or one of the units should be conveniently located."

"The dining room should be planned so that it can be used with class activities and not just on special occasions."

"The dining room should supplement the small tables with each unit kitchen or desk."

1/Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
"A dining room provides attractive home setting."

"Unit tables are much better. I would not have a dining room instead of them."

State supervisors recommended that:

"There should be a dining-living room."

"It would be better to have either the small tables with the dining room or else the living room which could be used for dining."

"Need the small tables. Dining room is too expensive for the amount of use given it."

City supervisors recommended that:

"The dining room must be large enough that the entire class may observe."

"In some schools it is possible to use the dining center but with large classes this center can be used only approximately twice a semester by each group."

"Not flexible for large groups."

"A dining room is desirable. My opinion is that too many people eat in the kitchen now-a-days. Young people need to become familiar with some of the formalities attendant upon dining room service. Certain foods may take on the semblance of a meal and can be set up for selected groups during class periods."

"Desirable with the combination room which provides only sufficient equipment and space for rotation of activities."

To summarize the judgments of 98 homemaking education leaders concerning the separate dining room as a serving center it is significant to note that 57.1 per cent of these leaders object to the plan, while 41.1 per cent of them approve. The main reasons for disapproving the arrangement seem to be that they consider the dining
room unnecessary because other provisions for serving may be more purposeful. These leaders contend that the dining room is impractical—it is expensive, few pupils are served, the room is little used, and it encourages inefficient management of steps and time. They further state that they do not consider it typical of home situations in many homes since it is too formal. Several commentators stated that the dining room was a difficult teaching arrangement and supervision of a separate room is difficult.

The points which were mentioned most frequently in favor of the separate dining room were that it provides an attractive home setting for establishing standards and for social functions, and secondly, it is useful to the homemaking department for out-of-class experiments, variations in equipment, and rotation of groups.

The value of the separate dining room depends on whether it is used sufficiently to justify it; the community, its pattern of living, and what the children have in their homes; the funds and space available; and the location of the dining room in relation to preparation units.

Both Small Tables and Separate Dining Room

A glance at Table 13 shows that 66.7 per cent of 98 homemaking education leaders endorse the serving arrangement which provides both the small tables and a separate dining room. Thirty-three per cent of them disapprove of the plan for various reasons. Two persons did not choose to make a decision, and 31 persons neglected to comment on this phase of the study.
The main reason given for approving the plan was that they believed such an arrangement provided a desirable learning situation because all pupils are provided for, there is opportunity for more varied types of service, it is usable in rotation of groups, and pupils may do out-of-class experiments. These leaders considered that the plan is adequate for all occasions, since it provides for different types of experiences. Whether the need is for family meals, social functions—guest meals or hospitality units, meal basis teaching, or tea-room service training, they regarded the arrangement as adequate. One teacher trainer believed that the plan provides opportunity for group management. Teacher trainers and city supervisors pointed out that the plan provides a typical home setting since it is similar to some home situations.

Teacher trainers and city supervisors who approved the plan asserted that it is efficient for short periods and is utilitarian in accommodating large groups of pupils. Supervisors regarded it as an elastic set-up allowing for any desirable arrangement.

Many of the homemaking educators believed that the value of the combination small table and dining room plan depended on several factors. The community, its pattern of living and what the children have at home, would influence three teacher trainers in their decision. Seven persons considered that the use to which the room was put, other purposes provided for, and whether the expense and space could be justified influenced their judgment. Fourteen persons would investigate the facilities available before making a decision relative to this plan for serving meals. The space available, the size of the
dining room, other rooms available, and the availability of funds would influence some supervisors in their judgment. Four trainers and supervisors of homemaking teachers would consider the school situation, the size, and the number of classes meeting at one time, before they would endorse the plan for meal service.

The arguments volunteered by the 32 persons who opposed the plan indicate that the plan has not proved to be practical in many instances. Fourteen persons regarded it as too expensive, and one teacher trainer stated that the increased building cost could not be justified. Several persons complained that the dining room is too little used, equipment is poorly used, and too much space is wasted. State supervisors and teacher trainers regarded such a plan as unnecessary duplication involving additional housekeeping work.\footnote{Original tables showing complete data on file in Home Economics Education Office, Oregon State College.}

Some of the recommendations and comments which these leaders volunteered based on their varied experiences deserve consideration. (See Appendix, p. 252.)

Some enlightening comments were volunteered by teacher trainers:

"This has worked out best in my teaching experience."

"I have taught where a separate dining room was in the department. It was nice to have for special occasions, but I believe that a living room rather than a dining room is best if one has to make a choice between the two."
State supervisors expressed their judgments based on their experience:

"A living room which can be used for dining as well as for other activities is preferable—can be used for more purposes."

"Dining room must be large enough and so located as to be used in variety of occasions."

"I have seen too many dining rooms treated as old idea of a "parlor"—only for company or a place for storing band instruments or costumes!"

"Dining room would probably not be used enough to warrant the space taken up."

"In most instances; small tables are sufficient."

City supervisors expressed some personal opinions:

"My experience with dining rooms is that they are used too little by classes to justify their cost. They are too small to include whole classes, as a rule."

"Better than the small tables alone when available."

To summarize the reactions of 98 homemaking education leaders to a serving arrangement consisting of small tables with each preparation unit and a separate dining room in addition, it may be observed that they generally endorse the plan, with 66.7 per cent approving, and 33.0 per cent rejecting the arrangement. A survey of the reasons given for endorsing the arrangement indicates that, in the experience of a majority of the leaders, the plan provides a desirable learning situation, since all pupils are provided for and the groups may rotate for varied experience. The dining room offers opportunity for more varied types of service, stated these commentators, and pupils may use the extra room for out of class experiments if desirable.
According to several of the educators, the dining room is efficient, elastic, and homelike, being typical of many home situations, utilitarian, and permits rearrangement at will.

The value of such a plan, according to many of the annotators, depends on the community, the pattern of living, and what the children have at home; the use of the room, if expense and space can be justified, and other purposes provided for; facilities available, space, other rooms, and funds; and lastly, on the school situation, size, and number of classes meeting at one time.

Those critics who rejected the plan stated that it represented unnecessary duplication and is impractical, involving expense, equipment, and space that is too little used.

**A Living Room Which Can Be Used for Dining As Well As for Other Activities**

It is apparent from Table 13 that the living room which may be used as a dining center is endorsed by a large majority, 96.5 per cent of 114 educators who checked the questionnaire. Three and one-half per cent disapproved of the arrangement, while one city supervisor did not choose to make a decision. The four main reasons given for approving the plan were: because it is so typical of many homes and apartments; it provides a desirable learning situation; it is efficient; and it is economical. Eight persons considered the living-dining room to be more homelike, typical of the needs of many families, and an opportunity for setting desirable home standards. They believed that such a room provided an opportunity for varied
types of activities as well as being helpful to pupils to learn possible use of limited space. By rotation in class, group organization is necessitated and there is opportunity for varied types of meal service, they stated. These leaders regarded the room as desirable for social activities, and for teaching aesthetic values and manners of conduct, and for hospitality units. Another use mentioned was in teaching care and arrangement of home furnishings. One state supervisor pointed out that one preparation group can always use this room for the meal service.

Twenty-six persons considered this room to be efficient. It is sufficiently flexible to be usable for small groups, good for low income groups, a center for all girls in the school, and in other ways a very utilitarian room. One teacher trainer called it a "double duty room," that every school should have. Thirteen persons consider the room to be economical of space and expense.

Factors which influence the value of the living-dining room were said to be: the use to which the room is put—whether expense and space can be justified; the community, pattern of living, and what the children have at home; facilities available—space available, size of the living room, other rooms available, other serving provisions provided, and the availability of sufficient funds. The plan of the department, that is, the location of the living room in relation to the food preparation units, the number of rooms and whether the department is a cottage type plan, all influenced the judgment of the commentators. Other persons were influenced in their decisions by
the school situation—the size of the school, the size of the classes, and the number of classes.1/

Since only four persons voted against the plan their reasons may best be expressed by quoting them. A teacher trainer said, "No, not if it means sacrificing the small tables." A state supervisor commented, "Too expensive for Vermont. Desirable in many ways, but additional expense cannot be justified in terms of greater results for a poor state like Vermont." One city supervisor objected because, "With large classes the room can be used so seldom by each group." Another city supervisor stated, "We cannot afford the space."

The recommendations and comments volunteered by the 114 homemaking educators extend the horizon of potentialities of the living-dining room. Sixteen of the trainers and supervisors of homemaking teachers stated that they considered it essential to have the small tables in connection with the unit kitchens or desks, and many of those who endorsed the plan did so only with the stipulation that the small tables be used also. One teacher trainer recommended that frequent experiences in serving even simple food combinations are desirable. In addition, on some occasions, meals should be served apart from the preparation units. A state supervisor recommended that this room be planned in addition to a corner or end of the laboratory or homemaking room arranged as a dining center.

1/ Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
Some of the comments forthcoming from these leaders as a result of their varying experiences with the living-dining room are thought-provoking. (See Appendix, p. 253.)

Teacher trainers contributed the following comments:

"In our region, building is becoming so expensive that many homes are being built in which the dining room and the living room are combined."

"Economical of space and provides for social and aesthetic values. Necessitates group organization if all are to experience social opportunities, unless the classes are very small."

"Good, assuming that the living room has space for a whole class. It is more utilitarian. Not very desirable if there are no small tables in the kitchen."

"Not instead of unit tables, but in addition to, if space and funds permit.

State supervisors commented:

"For guest purposes and special occasions. I would have individual group tables, too."

"More like the girls' homes. Very few dining rooms in New Mexico."

City supervisors point out other impressions of the living-dining room:

"Ideal if used in connection with the small tables with each unit."

"Would prefer this type of room with small tables at each unit rather than a so called dining room. If such a room is available for several foods laboratories, one gets more use of the amount of building space devoted to the homemaking rooms."

In any summarization of the findings in this study relative to the reaction of 114 homemaking education leaders to the living room which may be used as a dining center it is evident that the leaders
of homemaking education heartily endorse the plan with 96.5 per cent of them approving the plan, while 3.5 per cent reject such a plan for serving. The main reasons for favoring the arrangement appear to be that it is typical of many homes and apartments, it presents a desirable learning situation, it is efficient, and it is economical. These commentators regard the living-dining room to be more homelike than other plans, typical of the needs of many families, and a desirable home standard to set. Furthermore, they believe that the room provides opportunity for more varied types of activities than the other suggested arrangements. Several persons mentioned the significance to the pupils of learning possible uses of limited space and varied types of table service. Such a plan necessitates group rotation and therefore group management is stimulated, they asserted. A large percentage recognized the value of such a room for social activities, special occasions, learning aesthetic values, hospitality units of work, manners of conduct, and care and arrangement of home furnishings.

The utilitarian quality of the room was emphasized by many of the annotators. The flexibility of the room made it good for small groups, good for low income groups, a center for all girls in the school, and a room that every school needs, declared many homemaking education leaders. In addition, they stated, the room is economical of space and expense.

Factors on which the value of such a room depends were pointed out to be: the way the room is used, whether its use justifies the expense; the community; other facilities available; the plan of the
homemaking department, and the school situation, size, and number of classes.

The four persons who rejected the arrangement criticized it as being expensive, space consuming, difficult to use with large city-school classes, and inadequate without the additional small tables at the units of preparation.

**Other Desired Arrangements**

According to the information gathered from this item on the questionnaire, one of the most satisfactory arrangements for serving meals is a combination of the small tables provided for each unit kitchen or unit desk and a living room which can be used for dining as well as for other activities. Eleven teacher trainers, five state supervisors, and five city supervisors specified this arrangement as being most satisfactory. Some of the recommendations contributed in this section vary widely from the conventional and deserve attention in this study. (See Appendix, p. 253.)

A teacher trainer from New Mexico recommends breakfast nooks—tables and benches hinged to the wall and located near the preparation units.

A teacher trainer from New York prefers small tables in the home kitchen and in the living-dining unit. Card tables may be used.

Folding tables which could be stored in the units was recommended by a Wyoming state supervisor.

A city supervisor recommends a dining-living room between foods and clothing laboratories.

Other city supervisors commented:

"A combination living-dining room is more economical
from the building standpoint. It gives a home atmosphere. This supplements meals served at small tables in the work room."

"We have one serving table for each two units; half of the class are planning their meals while the other half are preparing. This has been quite satisfactory. We have tables which will combine for large groups."

"One school which I visit has two informal tables for four, and one extension table for six or eight, and a maple dining set for four persons in a combination living-dining room. The classes work out some interesting 'family' situations."

To view the question of serving provisions in general, it becomes apparent that these homemaking education leaders based their comments on the objectives which homemaking teaching attempts to accomplish. Consideration was directed toward the community, the pattern of living which predominates; training in the social graces, hospitality, and aesthetic values; practicality--efficiency, expense, and convenience; the school situation --available space, size of the school, and other available rooms. The methods which the teacher uses were given consideration--individual problems, meal-basis foods work, home situations, home standards, family groups, management teaching, and the learning environment provided. Freedom of action, confusion, participation possible, and supervision were terms and phrases which appeared consistently throughout the questionnaires. Attention may well be directed toward various comments contributed by the annotators in this study, as one teacher trainer remarked:

"I do not disapprove of any of these suggestions. Any one could be worked to good advantage if one were resourceful, energetic, and of an experimenting turn of mind."
"We feel that meal service is a part of the training of every girl and prefer tables and chairs with each unit. Whenever possible, we advocate a combination living-dining room where meals can be served to visiting groups with some degree of privacy," wrote a state supervisor from North Carolina.

**Summary of Opinions Concerning Arrangements for Serving Meals**

An analysis of the data relative to different arrangements for serving meals indicates that 69.5 per cent of the 124 homemaking educators did not consider any one arrangement to be especially desirable for all situations. Many persons stated that combinations of small tables and the living-dining area would be desirable, while others considered that too many factors entered into making a decision to enable them to state a choice.

One hundred ten homemaking education leaders approve, almost unanimously of the small tables provided with each unit kitchen or unit desk. Their reasons for favoring the plan indicate that tables provide a desirable teaching arrangement—social values may be recognized, the family situation is exemplified, serving can be taught as a part of meal preparation, and every one in the class may have an opportunity to gain experience in serving. Another merit of the small tables which was recognized by the educators is that they are economical of time, space, and energy.

It may be concluded from the opinions expressed on 101 questionnaires that the corner or end of the homemaking room or laboratory arranged as a dining center has many advantages as well as some
disadvantages. With 62.1 per cent of 101 homemaking education leaders approving and 35.6 per cent disapproving, it may be assumed that the plan needs careful study. Many leaders consider that it is an economical way of providing a serving area for class work when no other plan is possible, and it also provides for other activities in one room. Some of the factors on which the value of such an arrangement depends, according to these educators, are: the location in relation to the unit kitchens; space allowed and other rooms available for other work areas.

Disadvantages of the plan, these experienced leaders point out, are that it is difficult to adapt to many purposes, and it is not economical of steps, time, and space. According to these commentators, the plan is to be criticized because it provides for only part of the class at one time and affords little opportunity for management of time and effort. Moreover, they believe that it increases confusion in serving meals, and conflicts with the rest of the class who are not using the center.

To summarize the judgments of 98 homemaking education leaders concerning the separate dining room as a serving center, it is significant to note that 57.1 per cent of these leaders object to the plan, while 41.1 per cent of them approve. The main reasons for disapproving the arrangement seem to be that the dining room is considered unnecessary because other provisions for serving may be more purposeful. These leaders contend that the dining room is impractical, it is expensive, few pupils are served, the room is little used, and it encourages inefficient management of steps and time. Several
commentators stated that the dining room was a difficult teaching arrangement and supervision of a separate room is difficult.

The points mentioned in favor of the separate dining room were, first, that it provides an attractive home setting for setting standards and for social functions, and second, it is useful to the homemaking department for out of class experiments, variations in equipment, and rotation of groups.

The value of the separate dining room depends on whether it is used sufficiently to justify it; the community, its pattern of living, and what the children have in their homes; the funds and space available; and the location of the dining room in relation to preparation units, stated these trainers and supervisors of homemaking teachers.

To summarize the reactions of 98 homemaking education leaders to a serving arrangement consisting of small tables with each preparation unit and a separate dining room in addition, it may be observed that they generally endorse the plan, with 66.7 per cent approving, and 33.7 per cent rejecting the arrangement. A survey of the reasons given for endorsing the arrangement indicates that, in the experience of a majority of the leaders, the plan provides a desirable learning situation because it provides for all pupils, and the groups may rotate for varied experience. The dining room offers opportunity for more varied types of service, stated these commentators, and pupils may use the extra room for out of class experiments if desired.

The value of such a plan, according to many of the annotators, depends on the community, the pattern of living, and what the children have at home; it further depends on the use of the room, whether
expense and space can be justified, and other purposes it serves; it depends on facilities which are available, space, other rooms, and funds; and lastly, the value of such an arrangement depends on the school situation, the size, and the number of classes meeting at one time.

Those critics who rejected the plan stated that it represented unnecessary duplication and is impractical, involving expense, equipment and space that is too little used.

In summarizing the findings of this study relative to the reaction of 114 homemaking education leaders to the living room which may be used as a dining center, it is evident that the leaders of homemaking education heartily endorse the plan when 96.5 per cent of them approve the plan, while 3.5 per cent disapprove of such a plan for serving. The main reasons for favoring the arrangement appear to be that it is typical of many homes and apartments; it presents a desirable learning situation; it is efficient; and it is economical. These commentators regard the living-dining room to be more homelike than other plans, typical of the needs of many families, and a desirable home standard to set. Furthermore, they believe that the room provides opportunity for more varied types of activities than the other suggested arrangements. Several persons mentioned the significance to the pupils of learning possible uses of limited space and varied types of table service. Such a plan necessitates group rotation and therefore group management is stimulated, they asserted.

Factors on which the value of such a room depends were pointed
out to be: the way the room is used, whether its use justifies the expense; the community; other facilities available; the plan of the homemaking department; and the school situation, size, and number of classes.
CHAPTER V

ROOM ARRANGEMENTS FOR TEACHING FOODS

After a decision has been reached concerning the layout of the rooms constituting the homemaking department, another question promptly confronts the investigator: the arrangement within any one of these rooms. A survey of the present thinking regarding the arrangement of rooms for teaching foods was deemed apropos, so one section of the questionnaire was designed to investigate this problem. In order that the persons checking the inquiry would be completely free and uninfluenced in expressing their ideas for a foods room, no form was provided. The directions were:

By a rough sketch indicate the room arrangement you would choose for high school classes of 24 pupils. Be specific enough to show any grouping together of stove, sink, work table and storage space for cooking utensils and dishes. Indicate on the sketch the number of pupils who could satisfactorily be provided for in each group arrangement during a single class period.

Following the above directions ample space was allowed for the sketch, explanations, and comments.

Analysis of Findings

When the results of this section of the questionnaire were reviewed, it was evident that an analysis of such individual, diversified expressions necessitated studying the sketches for specific details. The initial perusal of the sketches revealed decided variations in the general type of room, so the findings for variations in types of rooms were summarized. This examination suggested other areas to be studied. The following phases evolved as significant,
and were investigated individually:

1. Types of rooms,
2. Types of work units used,
3. Provisions for serving meals,
4. Provisions for discussion center,
5. Work areas,
6. Equipment as related to the room arrangement.

Of 128 questionnaires returned by teacher trainers, state supervisors, and city supervisors of home economics education, 97 persons contributed information which is incorporated in this study. Many of these were personal sketches; others sent blue prints of plans which they approved; others sent printed plans recommended within their state or district. In all instances when a single plan was enclosed, it was considered as the choice of the individual sending it. In cases where several form plans were sent, the plans were not analyzed, since such material seemed out of the scope of this study, and the personal choice of the person sending it could not be ascertained.

Type of Room

Of the 97 persons who contributed information regarding the room arrangement for teaching foods, 84 of them gave sufficient details to enable the investigator to determine the type of room desired. Some of these homemaking education leaders chose to recommend a room which provided for only a study of food. For the sake of designation in this study, any plan which provides only for foods work will be termed a foods laboratory. These rooms may or may not provide facilities for dining, but student experience, to all appearances, is limited to studies in the area of foods. In all instances where any other phase
of homemaking was provided for in addition to studying foods, the room will be classified as a combination room. A study of Table 14 will clarify the various types of rooms which were suggested.1/

TABLE 14

Types of Rooms Recommended for Teaching Foods

<table>
<thead>
<tr>
<th>Type of Room###</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT#</td>
</tr>
<tr>
<td>Laboratory for foods work only: (May or may not include dining center)</td>
<td>18</td>
</tr>
<tr>
<td>Combination room:##</td>
<td>18</td>
</tr>
<tr>
<td>Unclassified: (Home Kitchen)</td>
<td>1</td>
</tr>
<tr>
<td>Insufficient information to determine:</td>
<td>6</td>
</tr>
<tr>
<td>Totals</td>
<td>43</td>
</tr>
</tbody>
</table>

###T-Teacher trainers; SS-State supervisors; CS-City supervisors.
##For explanation of combination rooms, See Appendix, p. 253.
###For comments relative to the types of rooms recommended for teaching foods, See Appendix, p. 253.

As Table 14 indicates, the teacher trainers were divided in their choice of a laboratory versus the combination room. It must be recognized, however, that the questionnaire specified a room arrangement for teaching foods, which may have veered the thinking in that direction. A comparison of the choices of state and city supervisors relative to the two types under consideration is, nevertheless, 1/Original tables showing complete data on file in Home economics Education Office, Oregon State College.
interesting, with the city supervisors swinging largely in favor of the laboratory. The foods and laundry combination appears most popular with this group of homemaking educators.

The one unclassified kitchen listed on the Table was an instance where only one food center was desired and that was a typical home kitchen partitioned off in one corner of the large general homemaking room.

It is evident that various factors affect one's decision regarding the type of room. These homemaking education leaders qualified many of their remarks with "it depends upon." Some of the factors mentioned were: plan of the department, type of program, and the school situation.

State supervisors considered, particularly, the plan of the department being concerned with the physical features: location of windows, doors, and lighting facilities. Five different persons mentioned the dependence of their choice on the size of the room and the amount of space available. Other rooms which were available influenced one state supervisor, and the relation of this room to other rooms in the department was considered by some commentators.

The type of program and its bearing on the uses for which the room must function gained some consideration; and, finally, the school situation was recognized as being a significant factor since every school presents a different problem.

To any one studying homemaking rooms and their arrangements, the numerous voluntary recommendations and comments from these leaders of wide experience seem invaluable. Even in cases of extreme
differences in opinion these expressions of beliefs provide broader understanding. (See Appendix, p. 253.)

These educators recommend that any partitions within the combination room be low. Some suggested that partitions be the height of the sink, others suggested not over five feet, while two specified partition height to be 4 to 6 feet. Some favored no partitions at all, and one state supervisor suggested that the partitions enclosing the unit kitchens be made of iron rods. Table space and cupboards should not be higher than 4 feet, they recommend; there should be toe room all around, and one teacher trainer considered it ideal to have a window in each unit over the sink.

The groups asserted that the arrangement should be informal rather than rigid in order that the needs of the particular situation would best be provided for. Several stated that arrangements that do not enclose a student are best; groups should be visible to the teacher, and pupils should be able to see activities of other groups. The use of cupboards and folding screens at dividing lines was recommended so the room could be changed in size to suit varying conditions.

Considering the appearance of the room, they recommended that the plan should have a home-like appearance. The kitchen should be like a home kitchen; the department should not look like a school room, but should express individuality and beauty, teacher trainers commented. In regard to the physical facilities, they would work for comfort. One teacher trainer commented: "To provide for individual and group problems would be my ultimate aim."

An analysis of the sketches and comments from the standpoint of types of rooms brings one to the realization that the philosophy of educating for homemaking which one has will largely determine the choice of room. If the paramount objective of the educator is to establish skills in working, the one room equipped for practice with large numbers of pupils will be preferred. If the aim is to develop learnings relative to foods concomitantly with other homemaking activities, various combinations will be featured.
Type of Work Unit Used in Foods Room

In attempting to digest the information contributed by the sketches, it seemed essential to give some specific attention to the varying types of work units suggested for food studies. Analysis of the plans suggested two main types: (1) the unit kitchen, and (2) the unit desk. For this study, the following definitions will apply throughout:

A unit kitchen is an arrangement of sink, stove, work table, storage facilities exemplifying a small home kitchen. The use of the space is ordinarily limited to an individual or a group of individuals.

A unit desk is an arrangement which offers space for storage below the working surface with the sink and stove nearby or connected. The working area is the aisle through which other students may pass.

In the opinions of these homemaking educators the unit kitchen takes preference over the unit desk, Table 15 shows.
TABLE 15

Types of Work Units Used in Foods Rooms

<table>
<thead>
<tr>
<th>Type of Work Unit##</th>
<th>Number of Times Selected by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT</td>
</tr>
<tr>
<td>Unit kitchen:</td>
<td>31</td>
</tr>
<tr>
<td>Unit desk:</td>
<td>6</td>
</tr>
<tr>
<td>Unclassified:</td>
<td>3</td>
</tr>
<tr>
<td>Insufficient info.</td>
<td>3</td>
</tr>
<tr>
<td>Totals</td>
<td>43</td>
</tr>
</tbody>
</table>

#TT-Teacher trainers; SS-State supervisors; CS-City supervisors. ##For comments relative to the types of work units recommended for teaching foods, See Appendix, p. 254.

Of the 128 questionnaires returned by teacher trainers, state and city supervisors, 97 expressed some opinion in response to this question of room arrangements for teaching foods. A study of Table 15 reveals that 64 of these educators prefer the unit kitchen as compared to 14 persons who would choose the unit desks. Eight plans of work units were so unique in their arrangement that they were listed separately as unclassified. Eleven of these contributors did not explain their plans fully enough to enable the investigator to determine their choice of work units. Concerning arrangement for the work unit, teacher trainers and city supervisors recommend that each kitchen should exemplify a home set-up, with each unit as self-sufficient as a home kitchen usually is. Waste of motion and steps should be avoided, and grouping should be approved by experts for
home kitchens, they contend.

In general the trend appears to be in favor of the unit kitchen with increased emphasis being placed on the matter of typifying the home kitchen as much as is possible in respect to appearance, arrangements which conserve time and energy, and originality and individuality planned for.

Number of Pupils in Each Group Arrangement:

Of the 62 educators who indicated the number of pupils that they would provide for in each group arrangement, 55 designated 4 pupils. Two persons recommended 5 pupils in a group; three persons recommended groups of 6 pupils; one advised groups of 2; and another advised more elasticity with a suggested range of 4 to 6 pupils provided for in group participation.

Provision for Serving Meals

It seemed to the investigator that there would be some relationship between the arrangements for serving discussed in Chapter IV and provisions for serving indicated on the sketches with accompanying comments and recommendation. Accordingly, the questionnaires were analyzed for any provisions made for the serving of food. There evolved four possibilities for serving: (1) a corner or part of the foods laboratory, (2) small tables for each unit, (3) the unit desk, and (4) other available rooms. In the instance of the unit desk, the investigator assumed that the top of the desk would be used for serving meals.
Of the 97 teacher trainers, state supervisors, and city supervisors who contributed information on this question, 18 were not sufficiently explanatory to enable the investigator to determine their beliefs regarding serving centers. All persons who expressed their ideas completely enough to make possible such an analysis, made provision for pupils to serve the food which they prepare.

Small tables for each unit were favored, with 57 persons of the 79 suggesting them. A large number, 30, would plan other adjoining rooms, and 23 would approve of using a corner or part of the laboratory. The number using unit desks is small, due probably to the fact that comparatively few persons recommended unit desks. Some persons desired more than one plan.

Provision for Discussion Center

Interest in the value of group discussions, stimulated the investigator to inspect the questionnaires for provisions indicated for discussion centers.

Of 97 teacher trainers, state supervisors, and city supervisors contributing data on this question, 75 were sufficiently specific to enable the investigator to determine provisions made for group discussions. Of these, 68 provided facilities which would allow sizable groups of pupils to gather into one group. Seven plans did not appear to provide any space or facilities adequate for group participation. On 21 sketches a definite part of the room was indicated as usable for group get-togethers. On 42 other plans the investigator recognized the room to be flexible enough that the teacher could
arrange for group gatherings when desirable. In 6 instances the unit desk would lend itself to group discussion, since no partitions or other high obstructions rendered the plan unsuitable.  

**Unit Kitchen Arrangements**

After the sketches and plans were analyzed with an eye for the general characteristics of the room, that is, the type of room described, the different activity areas were given specific attention. Areas for food preparation, for food service, and for discussion groups were singled out and studied in detail.

As the analysis progressed, it became evident that the initial typing of the work areas as to unit kitchen or unit desk arrangements did not recognize some of the information conveyed by the sketches and plans. It was discovered that four different patterns for unit kitchens were most frequently recommended on the questionnaire. Three persons described arrangements which were so unique that they have been recorded in an unclassified grouping. In order to clarify the discussion of the various patterns suggested, it seems necessary to provide a key in order to define and describe the various patterns to be discussed. For the purpose of this study unit kitchens will be classified under the following patterns: U-shape unit, Parallel unit, L-shape unit, Wall unit, and Unclassified.

Unit kitchens designed by the suggested patterns will be analyzed and discussed individually.

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1/ Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
**U-shape Units**

This pattern includes any arrangement of equipment where the sink, stove, table, and work surface enclose the working unit on three sides, leaving one end of the unit kitchen opening into the room. According to some homemaking education leaders, there are advantages in having some form of the U-shape unit kitchen, but no definite conclusions may be drawn from the information gathered from the questionnaires, since there are unlimited variations possible with such a plan, each offering some advantages and some disadvantages.

Two advantages of the arrangement as pointed out by those educators who recommended the plan indicate that the U-shape provides ample counter and storage space, and the work centers are adjoining or within reaching distance of each other. It is evident that different arrangements within a U-shape unit causes various directions of movement.

A total of 19 homemaking education leaders designated the U-shape unit kitchen—seven teacher trainers, seven state supervisors, and five city supervisors. It is evident that so much depends on the specific situation, the physical plant with which one would work, the teacher in charge, and the objectives of the homemaking course, that much additional investigation would be necessary before any decision could be reached.

**Parallel-shape Units**

This pattern has the equipment arranged on two sides of the unit
of working space with no equipment at either end of the enclosure. Eleven homemaking educators recommend the parallel-shape plan—seven teacher trainers, three state supervisors, and one city supervisor.

These homemaking education leaders point out that with the parallel arrangement in the unit kitchens the sinks and stoves of two units may be put back to back, which would be an advantage in some buildings. Some of the leaders recognize as an advantage the work centers adjoining each other or within reach. When two parallel units are adjoining, the working area is enlarged, stated some teacher trainers.

Various arrangements of sink, table, and stove within the parallel unit determine the movement within the kitchen unit, permit varying uses of the equipment, and determine the accessibility of pieces of equipment. With some arrangements, the dining table may be used for both serving and as a work table; other arrangements may have a stove which is accessible on only one side, or on two sides, or even three or four sides may be accessible. The amount of cross traffic is one problem which may influence the arrangement of equipment within the parallel unit. The advantages of having counter space on either one or both sides of the sink or counter space near the stove may influence arranging the equipment within the units.

The opinions gathered from the eleven homemaking educators who recommended the parallel plan for unit kitchens does not furnish sufficient material on which one could base any conclusions. To a great degree the philosophy of the individual person influences any decisions.
L-shape Units

Fifteen homemaking educators recommended the L-shape unit kitchen. Eleven of these were teacher trainers, three were state supervisors, and one was a city supervisor. The endorsers of this pattern for unit kitchens claim several advantages for the plan: work centers are within reach of each other; pupils are segregated, yet the entire room is visible to the teacher; and the room is adaptable to the combination type. The main disadvantage recognized in such a plan is that there is less counter and storage space.

Wall Units

Four homemaking educators recommended unit kitchens which are arranged along the wall, and three other teacher trainers described units which were variations of the wall units. The main advantages cited were that every part of the room is visible to the teacher, and the center area can be used for discussion. Disadvantages mentioned were that only one side of the stove is accessible, and the work area may be crowded for four pupils. Some variations of the wall unit were suggested. Having the work counter on both sides of the stove was recommended by one teacher trainer, and placing the sink next to the stove was advised by two teacher trainers.

Unclassified Patterns

One teacher trainer and two city supervisors recommended plans for unit kitchens which were so unique that it was deemed advisable to
treat them separately.

One city supervisor recommended that all the equipment should be movable except the sink and the stove and that the cabinets be table height with the top finished as table tops.

A teacher trainer indicated a plan with no counter space near stove, sink, or table.

It is evident from a study of the foregoing patterns of unit kitchens that there may be many different arrangements of sink, stove, work surface, cabinet, and table within a unit. Of the four main patterns described herein, nineteen homemaking educators chose a U-shape unit; fifteen persons preferred the L-shape unit; eleven recommended the parallel unit; and seven educators would select the type which is all placed along a wall. Others described more unusual patterns. Each pattern apparently has its own merits. The advantages and disadvantages of each pattern as recognized by these homemaking education leaders are summarized as follows:

Advantages of the U-shape pattern:

- Plenty of counter and storage space;
- Work centers adjoin, and are within reaching distance of each other.

Advantages of the L-shape pattern:

- Work centers are within reach of each other;
- Pupils are segregated, yet the entire room is visible to the teacher;
- It is suitable for combination rooms;
- It is suitable when there is limited space.

Advantages of the parallel pattern:

- Sinks and stoves are placed back to back;
- With some variations of the parallel plan, the dining table may be used for both serving and as a work table.
Advantages of the wall pattern:

Every part of the room is visible to the teacher;
Center area can be used for discussion.

Disadvantage of the L-shape pattern:

Less counter and storage space.

Disadvantages of the parallel pattern:

In some of the variations of this pattern, the stove is accessible only on one side;
With other variations there may be considerable cross traffic;
In some variations the sink has counter space on one side only;
Some arrangements of this pattern may be inconvenient for four girls to work at one counter.

Disadvantages of the wall pattern:

Only one side of the stove is accessible;
Work area may be crowded for four pupils.

Different variations of each pattern are possible. The matter of unit kitchens bears much more investigation, and each individual situation needs careful analysis before any decision might be reached.

Arrangements of Sink, Stove, and Other Work Areas

In the analysis of the sketches and plans for rooms in which to teach foods it became evident that there are several different arrangements possible for the main centers of work within the unit, whether it be unit kitchen or unit desk. The relation of the sink to the work surfaces and the stove; the relation of the stove to the meal table and the food preparation areas; and the location of the main passages to these main pieces of equipment varied. Table 16 shows some of the
arrangements recommended by the homemaking educators who contributed their judgments to this study.

TABLE 16

Arrangements of Sink, Stoves, and Other Work Areas

<table>
<thead>
<tr>
<th>Arrangements</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT #</td>
</tr>
<tr>
<td>Sink with counter space on both sides:</td>
<td>18</td>
</tr>
<tr>
<td>Sink unit near the meal table:</td>
<td>16</td>
</tr>
<tr>
<td>Sink adjoins food preparation center:</td>
<td>23</td>
</tr>
<tr>
<td>Stove center adjoins food preparation:</td>
<td>17</td>
</tr>
<tr>
<td>Stove center near the serving center:</td>
<td>18</td>
</tr>
</tbody>
</table>

#TT-Teacher trainers; SS-State supervisors; CS-City supervisors.

1/Original tables showing complete data on file in Home Economics Education Office, Oregon State College.

Since there was no suggestion made as to what the commentators should state in this section of the questionnaire the number of persons mentioning a specific factor is not significant. It may be noted on Table 16 that in 44 instances the investigator could determine the relationship of sink to counter space. This does not mean that the other 78 persons did not have definite opinions concerning such a relationship. What does seem significant, however, is that of the 22 teacher trainers who did give information pertaining to the relationship of sink to counter space 81.8 per cent would have counter space on both sides of the sink, and 18.2 per cent of the 22 persons
would not have counter space on both sides of the sink. Of the 16 state supervisors who explained their ideal arrangement in this respect 81.3 per cent would have the counter space on both sides of the sink and 18.7 per cent would not. Turning to the 15 city supervisors volunteering this information, 86.6 per cent would have a counter on both sides of the sink, and 13.4 per cent would not. In other words of the total of 53 persons giving this information 83.0 per cent would have both sides of the sink joined with counter space and 17.0 per cent would not.

Concerning the relationship of the sink to the meal table it is seen by Table 16 that 72.7 per cent of the 22 teacher trainers, 57.1 per cent of the 14 state supervisors, and 72.7 per cent of the 11 city supervisors contributing information relative to this question would have the sink near the meal table. Twenty-seven per cent of the teacher trainers, 42.9 per cent of the state supervisors, and 27.3 per cent of the city supervisors would not have the meal table and the sink closely related. When the total of 47 educators is analyzed, it is discovered that 68.1 per cent of them would have the sink unit near the meal table, and 31.9 per cent of them would not.

Should the food preparation center adjoin the sink? According to 54 homemaking educators indicating their opinions, 96.3 per cent think that these two centers should join, while 3.7 of them would not have them so arranged. To study the groups separately, it is seen that of the 23 teacher trainers all of them would join the sink and the food preparation center. All 16 of the state supervisors indicating their judgment concerning the arrangement for sink and food preparation
center would have them adjoined. Of the 15 city supervisors contributing their opinions concerning this question, 86.6 per cent would, and 13.4 per cent would not join these two centers.

An analysis of the relationship of the stove center to the food preparation unit shows that 77.3 per cent of the teacher trainers, 75.0 per cent of the state supervisors, and 84.6 per cent of the city supervisors would have the stove center adjoining the food preparation table. Of the 22 teacher trainers 22.7 per cent would not have the food preparation table adjoin the stove center, of the 16 state supervisors 25.0 per cent would not, and of the 13 city supervisors indicating this information 21.6 would not have these two centers joining. Of the total of 51 persons, 78.4 per cent would have the stove join the preparation center and 21.6 per cent would not.

A study of the relationship of the stove to the serving center shows that 81.8 per cent of the teacher trainers, 78.6 per cent of the state supervisors, and 60.0 per cent of the city supervisors would have the stove center near the serving center. Of the 22 teacher trainers 18.2 per cent would not have these two centers close together, of the 14 state supervisors 21.4 per cent would not, and of the 10 city supervisors 40.0 per cent of them would not have the stove and the serving center placed near each other. Of the total of 46 persons giving this information 75.0 per cent favor, while 25.0 per cent did not indicate that the stove center should be near the serving center.

To further condense the information gathered on the relationship of centers of work within a unit, it may be noted that 83.0 per cent
of the educators contributing the information would have the sink with counter space on both sides; 68.1 per cent would have the sink unit near the meal table; 96.3 per cent would have the sink adjoin the food preparation center; 78.4 per cent would have the stove center join the food preparation table; and 75.0 per cent would have the stove center near the serving center.

**Equipment as Related to the Room Arrangement**

Although Chapter VI deals with a study of equipment for a foods room, some interesting recommendations and comments about equipment sifted from the analysis of the sketches and plans. Since these suggestions for equipment deal so closely with the room and its arrangement, the matter of equipment as it is related to the room arrangement will be treated here.

According to these homemaking educators who indicated their choice in an arrangement for teaching foods, the equipment depends on several factors: the plan and breadth of the homemaking program; the size of the school; the economic levels of the people in the community; the building, size of room, windows and openings in the walls.

Some of the recommendations volunteered by these experienced homemaking educators deserve consideration. (See Appendix, p. 254.)

Units should feature different equipment and materials, such as gas, electric, and kerosene ranges, depending on the community. Equipment should not all be alike because different income levels in furnishings is desirable and should be in keeping with the economic level of the community. Some plan should be made then to rotate equipment with the different groups of pupils. Different working surfaces should be provided—tile, wood, linoleum, porcelain, and metal. Cabinets should differ by having both built in and ready made.
Units should have flexible or movable equipment and have as few stationary fixtures as possible. Other equipment can be moved to give space for other necessary activities. Serving tables can be folded to a small size when not in use. All equipment except the stoves and the sinks may be made movable.

According to these homemaking education leaders, units should feature different equipment and materials; units should have flexible or movable equipment; all serving tables should be of the same type to allow for combinations of them; refrigerator should be placed in consideration of units or other rooms which it serves; and the homemaking rooms should be homelike, permit a broad course, permit activities to be done as they are done at home, and should be such as to permit up-to-date methods of teaching and learning. Equipment depends on the plan or breadth of the course, the school, the economic level, and the physical facilities of the room, according to these homemaking education leaders.

**Modifications of the Foods Room**

**For Varying Situations**

Following the space allowed on the questionnaire for the sketch of the room in which to teach foods were four specific questions designed to determine the influence of the availability of funds, the effect of the size of the class groups, and age differences.

The questionnaires were analyzed and the number of persons who recommended some modification for situations where funds are limited, where classes are small, or where classes are very large were tabulated
and are recorded in Table 17. The various modifications which these homemaking education leaders suggested are recorded in the following table.
TABLE 17
Modifications of the Foods Room for Situations Where Funds Are Limited; Classes Are Small; Classes Are Large

<table>
<thead>
<tr>
<th>Modifications</th>
<th>Number of Times Given by</th>
<th>TT</th>
<th>SS</th>
<th>CS</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>If funds are limited:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes: Modifications recommended:</td>
<td>26 19 14 59</td>
<td>15</td>
<td>13</td>
<td>19</td>
<td>37</td>
</tr>
<tr>
<td>A. In arrangement:</td>
<td></td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>1. Reduce floor space:</td>
<td></td>
<td>8</td>
<td>5</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>2. Reduce number of work units:</td>
<td></td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>a. More girls to each unit:</td>
<td></td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>b. Rotate activities:</td>
<td></td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>3. Plan combination homemaking room:</td>
<td></td>
<td>13</td>
<td>10</td>
<td>10</td>
<td>33</td>
</tr>
<tr>
<td>B. In Equipment:</td>
<td></td>
<td>18</td>
<td>13</td>
<td>10</td>
<td>41</td>
</tr>
<tr>
<td>1. Buy less equipment:</td>
<td></td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>2. Buy less expensive equipment:</td>
<td></td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>3. Purchase on long time plan:</td>
<td></td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>No: No modifications recommended:</td>
<td></td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>If classes are usually small:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes: Modifications recommended:</td>
<td>25 20 16 61</td>
<td>24</td>
<td>20</td>
<td>15</td>
<td>59</td>
</tr>
<tr>
<td>A. In arrangement:</td>
<td></td>
<td>21</td>
<td>15</td>
<td>10</td>
<td>46</td>
</tr>
<tr>
<td>1. Reduce floor space:</td>
<td></td>
<td>9</td>
<td>9</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>2. Reduce number of work units:</td>
<td></td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>B. Reduce Equipment:</td>
<td></td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>No: No modification recommended:</td>
<td></td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>A. Reduce number of girls to each unit:</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>If classes are usually large:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes: Modification recommended:</td>
<td>31 15 15 61</td>
<td>19</td>
<td>9</td>
<td>13</td>
<td>41</td>
</tr>
<tr>
<td>A. In arrangement:</td>
<td></td>
<td>12</td>
<td>7</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>1. Increase floor space:</td>
<td></td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>2. Provide more units:</td>
<td></td>
<td>9</td>
<td>6</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>B. More girls working in each unit:</td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

TT-Teacher trainers; SS-State supervisors; CS-City supervisors.
Modifications for Limited Funds

A survey of the reactions of 65 teacher trainers, state supervisors, and city supervisors as to what modifications they would make for a situation in which funds are very limited is shown in Table 17.

Twenty-six teacher trainers, 19 state supervisors, and 14 city supervisors would modify the foods room in case the funds were very limited. Thirty-seven homemaking educators, Table 17 shows, would modify the arrangement of the room. One way that they would do this would be to reduce the floor space, stated 11 persons.

Fifteen educators would reduce the number of work units, Table 17 indicates. In order to do this, five persons would have more girls to each unit, and 7 persons would rotate the activities. Nine persons recommended that a combination homemaking room be planned, while one teacher trainer, one state supervisor, and one city supervisor advised replacing the unit kitchens with unit desks.

Forty-one homemaking educators would modify the equipment if funds are limited. Ten educators would purchase equipment on a long time plan, and twenty-one persons would buy less expensive equipment. Three teacher trainers and one state supervisor would have less expensive built-ins; one teacher would have the cheapest local fuel; and one teacher trainer would use card tables instead of dining tables. Other recommendations for buying less expensive equipment were: "Do without complete electrical equipment;" "Floor stained rather than covered with linoleum;" and "Storage space built-in by local cabinet maker."
Twenty one homemaking education leaders would buy less equipment. For example, 10 persons would decrease the number of stoves and have two groups of pupils use one stove; 10 persons would decrease the number of sinks and have two groups to each sink; one state supervisor would decrease the number of tables; and one teacher trainer would omit the laundry group.

Three teacher trainers and two city supervisors would make no modifications in their plan if the funds were very limited.

Recognizing that 59 persons of the 65 expressing some opinion relative to the modifications for limited funds considered that some modifications were advisable and 5 did not believe that any adjustment could be made, it may be concluded that a majority of educators would adjust their plans to the funds available. One person was undecided as to whether modifications would be necessary. The main modifications which these 59 persons would make would be in the arrangement of the room or in the equipment. Thirty-seven persons would make changes in the room or other arrangements by reducing floor space, reducing the number of work units and have two groups use each unit or else rotate the activities, or plan a combination homemaking room.

Changes which they would make in equipment would be to purchase on a long time plan, buy less equipment, or buy less expensive equipment. Individual recommendations volunteered were: "I'd want at least one good example of equipment suitable to their economic level," and "Table top cabinets might serve as tables and cabinets."
Modifications for Small Classes

The responses to the question regarding modifications for small classes were analyzed and condensed in Table 17. Seventy teacher trainers, state supervisors, and city supervisors answered this question.

As Table 17 reveals, 71 homemaking educators contributed their opinions to this phase of the study, with 61 persons believing that some modification would be advisable if the classes were usually small, and 10 persons stating that they would make no modification in the room, but would reduce the number of girls for each unit.

Of the 61 persons who would make some changes, 59 would modify the arrangement of the room. Twelve of these persons would reduce the floor space. Forty-six educators would reduce the number of work units, Table 17 shows.

Twenty-two persons would use the room for diversified activities. For example, nine persons would use one room for foods, clothing, and living room; two teacher trainers would combine foods and dining in the one room; and one teacher trainer and one state supervisor would combine foods and clothing in one room; and a state supervisor recommended that the one room be made a foods and living area.

Five persons recommended reducing the equipment when the classes are small. Some specific recommendations made in this respect were: to have less home furnishings; to reduce the number of tables; to have fewer stoves. Two city supervisors advised replacing unit desks
with unit kitchens. One state supervisor recommended: "I would have a combination room and use movable screens."

In summary it may be noted that of the 71 persons expressing their judgments regarding whether the foods room should be modified for small classes 61 of the educators would make some changes. A majority of these persons, 59 of the 61, would adjust the arrangement of the room—12 persons would reduce the floor space; 46 persons would reduce the number of work units; and 22 persons would use the room for diversified activities having different combinations of discussion areas, living areas, dining, clothing, and conference areas. Five persons would reduce the equipment.

Ten persons would make no adjustment for the smaller classes, but would reduce the number of girls for each unit.

**Modifications for Classes of More than Twenty-Four Pupils**

Sixty-five teacher trainers, state supervisors, and city supervisors answered the question dealing with modifications for large classes of over twenty-four pupils. The opinions of these educators is recorded in Table 17. It will be noted that no one stated that no adjustments were necessary. However, four persons did not state that definite changes had to be made. They would rather make the adjustment in their method of teaching and use of the facilities.

Sixty-one homemaking education leaders stated that they considered that some changes would be advisable if classes were larger.

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1/ Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
than 24 pupils. Forty-one educators recommended that some adjustments should be made in the arrangement of the room. For example, 11 persons advised increasing the size of the laboratory; 5 persons suggested the use of additional rooms; 26 leaders would provide more units. In respect to providing more units one teacher trainer recommended increasing floor space by 75.0 per cent; another teacher trainer recommended leaving space, plumbing and pipes in the back of the room for one or two more units as needed; one teacher trainer described a plan where the living center and four unit kitchen centers would be separated by two sets of panel doors; and, one teacher trainer advised providing as many as eight unit kitchens but more than eight she considered to be too many. Two teacher trainers and one city supervisor recommended decreasing the size of the unit kitchens so that more units might be added.

Four homemaking educators would change the arrangement of the room and provide extra working space. In order to do this one city supervisor would have extra desks; one teacher trainer would use the meal service center as a working unit; and, another teacher trainer would use kitchen tables as work centers.

Twelve educators would have more girls working in each unit. Comments relative to this recommendation were: "Extra girls in each unit is not very satisfactory, but can be done;" and, "More pupils in a unit is one solution, but is not so desirable."

Sixteen persons, 9 of whom were teacher trainers, recommended that the different activities be rotated. Four persons, two of whom were city supervisors recommended providing extra equipment. One
teacher trainer stated that the solution of this problem depended on the demands made by the administration.

By the recommendations and comments of these homemaking leaders one may profit by their experience. Teacher trainers recommended using more demonstrations and making plans so that the students can give the demonstrations. A teacher trainer remarked, "This would be a problem for the administration in registration. Only so many can be handled well at a time. Food units would be planned accordingly to take care of the demands made by the students." A city supervisor commented: "We have many classes in Baltimore that are over 24 pupils. We have to adapt our laboratory space to the situation—not always is it desirable but we manage to make it workable. This situation requires good teachers who have initiative and good organization ability."

In summary it may be observed that of 65 persons reporting, 61 of them recommended that some modifications be made in cases where the classes are larger than 24 pupils. The changes which were suggested were: to change the arrangement of the room by increasing the size of the laboratory, using additional rooms, providing more units, or by providing extra working space in other ways; putting more girls in each working unit; rotating activities; providing extra equipment; or by using more demonstrations. One teacher trainer stated that the solution of the problem depended on the demands from the administration. Several persons were so opposed to having more than 24 pupils in a class that they declined to suggest a plan or solution to this problem of large classes.
Modifications for Age Differences

The fourth question dealt with the modifications advisable when separate rooms are provided for junior high school and senior high school pupils. Seventy-seven homemaking educators responded to this question. A majority of the leaders would have the same general arrangement for junior high school as they would for senior high school. However, 13 persons, 17.0 per cent, would have some things different, depending on the age and physical size of the pupils. Thirty-six persons believe that unit kitchens are satisfactory for both; 7 other persons would have unit desks for both high school ages; and one teacher trainer and one city supervisor would provide home kitchens for either group.

Thirteen educators, seven of whom were teacher trainers, would make some modifications for a junior high school situation. Regardless of what they had for the senior high school classes, three teacher trainers would provide unit desks for the junior high school, while four homemaking educators would have combination rooms for junior high school pupils.

Five educators believed that the arrangement for the junior high school age pupils depended on several factors. One teacher trainer stated that the plan depended upon the purposes set up for the two groups; one state supervisor believed that the amount of time allowed for homemaking for the girls determined the room requirements; one city supervisor stated that the needs of the students and the community would influence her in planning for junior high school pupils; and, another city supervisor asserted that the type of home economics
taught—vocational or general—would determine the needs for physical facilities.

Some of the persons who advised that the room be modified for the junior high school situation made recommendations which deserve consideration: (See Appendix, p. 254.)

Four teacher trainers and one state supervisor recommended that junior high school pupils need equipment of proper height.

Other teacher trainers recommended that less equipment is needed in junior high school groups, and that there be no partitions in junior high classes because of waste of space.

Some comments based on the experience of these homemaking education leaders aid in understanding better the two situations presented by the different age groups:

"I believe that the junior high school should be as well equipped as the senior high school for the first year of homemaking must be attractive for the girls if they are interested in future classes."

"The philosophy underlying homemaking education would be the same."

"They would be the same because each would be as nearly as possible a natural setting."

"Arrangement would be the same but emphasis would be different in what is taught."

"Units are satisfactory for both junior and senior high school. Such arrangements are satisfactory for either individual or group preparation and serving of food."

"Junior and senior high school girls come from the same homes."

"I would choose a unit desk arrangement with one or two unit kitchens for the junior high school because it is economical for larger classes and lends itself to foods problems at the more elementary level. Also, I would have
space and equipment for diversified homemaking activities."

"Junior high pupils are not ready to work under limited supervision in unit kitchens. I would have unit desks and be sure that space is provided for serving meals."

"In Montana we do not encourage too much foods work in junior high school but stress child guidance, health, personal care and grooming, time management, 'family fun' and care of clothes."

"I have no general decision concerning arrangement except that facilities for all home activities be provided: a unit for food preparation and service for all girls should be provided and a place for social life."

In conclusion, it may be said that according to 78.0 per cent of the homemaking educators contributing to this study there is no need for the foods rooms of junior high schools to be very different from those recommended for the senior high school classes. The unit kitchen is preferred for both groups by 46.7 per cent of these educators; the combination room is recommended for both junior and senior high school classes by 14.3 per cent of 77 persons; seven persons advised the unit desks for both groups; and, one teacher trainer and one city supervisor advised a home kitchen type of arrangement for both age groups.

Of the thirteen persons, 17.0 per cent of the 77 persons involved in this study, four would recommend the combination room for junior high school regardless of what they had in the senior high school. Five educators stated that the room arrangement for junior high school depended on the time given to homemaking, on the nature of the homemaking course, and on the community. Five persons, four of whom were teacher trainers and one a state supervisor, expressed the need for
equipment to be of proper height for junior high school students.

**Summary of Opinions Concerning the Room Arrangements for Teaching Foods**

An analysis of the judgments expressed by 130 homemaking educators brings one to the realization that the philosophy of educating for homemaking which one has will largely determine the type of room which one would choose. If the paramount objective of the educator is to establish skills in working, the one room laboratory equipped for practice with large numbers of pupils will be preferred. If the aim is to develop learnings relative to foods concomitantly with other homemaking activities, then various combinations of working areas and rooms will be featured.

In general, the trend appears to be in favor of the unit kitchen for a work unit. Increased emphasis is being placed on typifying the home kitchen as much as is possible, in respect to appearance, arrangements which conserve time and energy, and in originality and individuality.

Of the 62 educators who indicated the number of pupils for which they would provide in each group arrangement, 55 designated four pupils. Two persons recommended 5 pupils in a group.

All persons who expressed their ideas completely enough to permit an analysis of the serving provisions recommended, made some provision for pupils to serve the food which they prepare. Small tables for each unit was favored. A large number of educators would plan other adjoining rooms for serving centers, and some would approve
of using a corner or part of the laboratory. Those persons who recommended unit desks in the foods room would use them for the serving centers.

In many instances a definite part of the laboratory was indicated as usable for group discussions, while in a majority of the others, sufficient space was available for a discussion area. Patterns for unit kitchens were studied specifically. According to some homemaking education leaders, there are advantages in having some form of the U-shape unit kitchen, but no definite conclusions may be drawn from the information gathered from the questionnaires since there are unlimited variations possible with such a plan, each offering some advantages and some disadvantages. So much depends on the specific situation, the physical plant with which one would work, the teacher in charge, and the objectives of the homemaking course, that much additional investigation would be necessary before any decision could be reached. Other educators recommended the parallel pattern for unit kitchens. This pattern, likewise, carries with it both advantages and disadvantages and depends on factors similar as those cited for the U-shape pattern. Fifteen homemaking educators recommended the L-shape unit kitchen, and four others recommended unit kitchens which are arranged along a wall. It is evident from the limited study of unit kitchen patterns involved in this study that there may be many different arrangements of sink, stove, work surface, cabinet, and table within a unit. Of the four main patterns described by the commentators on this study, eighteen homemaking educators chose a U-shape unit; fifteen persons preferred the L-shape unit; eleven
recommended the parallel unit; and seven educators would select the
type which is all placed along a wall.

The information gathered by this investigation regarding the
relationship of centers of work within a unit indicates that 83.0 per
cent of the educators contributing the information would have the
sink with counter space on both sides; 68.1 per cent would have the
sink unit near the meal table; 96.3 per cent would have the sink
adjourn the food preparation center; 78.4 per cent would have the
stove center join the food preparation table; and 75.0 per cent would
have the stove center near the serving center.

According to these homemaking education leaders, units should
feature different equipment and materials; units should have flexible
or movable equipment; all serving tables should be of the same type
to allow for combinations of them; refrigerators should be placed in
consideration of units or other rooms which it serves; and the home-
making rooms should be homelike, permit a broad course, permit
activities to be done as they are done at home, and should be such as
to permit up-to-date methods of teaching and learning. They believed
that the equipment depends on the plan or breadth of the course, the
school, the economic level, and the physical facilities of the room.

It may be concluded that a majority of educators would adjust
their plans to the funds available, since 59 persons of the 65
expressing some opinion relative to the modifications of foods rooms
considered that some changes were advisable, while five persons did
not believe that any adjustment should be made. The main modifica-
tions which these 59 persons recommended were in the arrangement of
the room or in the equipment. Thirty-seven persons would make changes in the room or other arrangements such as reducing floor space, reducing the number of work units, or rotating the activities in a combination homemaking room. Changes which they would make in equipment would be: to purchase on a long time plan, buy less equipment, or buy less expensive equipment.

It may be noted that of the 71 persons expressing their judgments regarding whether the foods room should be modified for small classes, 61 of the educators would make some changes. A majority of these persons, 59 of the 61, would adjust the arrangement of the room. Twelve persons would reduce the floor space; 46 persons would reduce the number of work units; and 22 persons would use the room for diversified activities having different combinations of discussion areas, living, dining, clothing, and conference areas. Five persons would reduce the equipment. Ten persons would make no adjustment for the smaller classes, but would reduce the number of girls for each unit.

It may be observed that of 65 persons reporting, 61 of them recommended that some modifications be made in cases where the classes are larger than 24 pupils. The changes which were suggested were: to change the arrangement of the room by increasing the size of the laboratory, by using additional rooms, providing more units, or by providing extra working space in other ways; to put more girls in each working unit; to rotate activities; to provide extra equipment; or to use more demonstrations. Several persons were so opposed to having more than 24 pupils in a class that they declined to suggest
a plan or solution of this problem of large classes.

It may be said, according to 78.0 per cent of the homemaking educators contributing to this study, that there is no need for the foods rooms of junior high schools to be very different from the room recommended for the senior high school classes. The unit kitchen is preferred for both groups by 46.7 per cent of these educators; the combination room is recommended for both junior and senior high school classes by 14.3 per cent of 77 persons; seven persons advised the unit desks for both groups; and one teacher trainer and one city supervisor advised a home kitchen type of arrangement for both groups. Of the thirteen persons, 17.0 per cent of the 77 persons involved in this study, four would recommend the combination room for junior high school regardless of what they had in the senior high school. Five educators stated that the room arrangement for junior high school depended on the time given to homemaking, on the nature of the home-making course, and on the community. Five persons, four of whom were teacher trainers and one a state supervisor expressed the need for equipment to be of proper height for junior high school students.
CHAPTER VI

SELECTION OF SMALL EQUIPMENT

In planning homemaking rooms, careful consideration must be given to the selection of equipment. To insure effective functioning in the home of in-school instruction dealing with foods, equipment must be provided which will facilitate the transition from school to home. A functioning learning environment relies on adequate equipment for meal planning, food selection, purchase, storage, preparation and service, as well as care of this equipment. The objectives of this study were contingent upon more than the information now available relative to the small equipment to be used by the pupils in preparing and serving meals. Some of the more prominent problems were: the number of each article of equipment that should be provided in the units for the working groups, the additional number of the same equipment to be stored in the foods room other than within the units, the number of pupils for which to equip each unit, and to what extent the equipment should be similar if not identical.

One section of the questionnaire was devoted to an investigation of judgments pertaining to these problems. For the sake of controlling responses to a sufficient degree that the investigator would procure comparable statements on which to base an analysis, a general situation of six unit kitchens each equipped for four pupils was specified. This, of course, turned the thinking, to some extent, into a mold which inevitably confined their contributions. The aim in devoting one section of the investigation to this study of equipment was to obtain opinions concerning the number of articles of
equipment which would prove most serviceable. The scope of this study did not necessitate a complete list of equipment, and it was assumed that tendencies indicated on a few illustrative pieces would be applicable on other articles. The following were listed on the questionnaire for consideration: dinnerware—plates, cups and saucers, knives and forks; and kitchen utensils—sauce pans, frying pans, double boilers, muffin tins, and egg beaters.

The limitations of the list seemed to confuse several of the commentators, but some pertinent conclusions may be drawn from the findings. The data pertaining to the selection of small equipment was organized into four separate phases of the problem:

1. Articles of equipment to be stored within the unit kitchens;
2. Articles of equipment to be stored elsewhere in the room;
3. The number of pupils for which to plan in each unit;
4. Similarity or variations in equipment in the different units.

Findings relative to these four aspects will be recorded and discussed individually throughout the remainder of this chapter.

**Articles of Equipment to be Stored**

**Within the Unit Kitchen**

A study of the numbers recommended for the articles of equipment indicated that the meal service ware, as a group, was not based on the same needs which governed the number of kitchen utensils recommended. For the four pupils, eighty-two persons provided dishes and silver for four only with a few recommending extra plates, cups
or saucers, knives or forks; fifteen other persons provided a set of six of everything for meal service; and two persons provided a set of eight in everything in meal service ware for the four pupils suggested.

Consideration was next given to the opinions relative to providing various sizes in kitchen utensils.

**Variations in Size of Equipment Recommended**

The data was studied and the number of different sizes recommended for a specific utensil was tabulated. Table 18 shows the opinions of these homemaking educators relative to the number of different sizes of a utensil that should be provided for the unit kitchens.
### Table 18

Number of Different Sizes in Utensils Recommended

<table>
<thead>
<tr>
<th>Articles of Equipment and Variations in Sizes Recommended</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT#</td>
</tr>
<tr>
<td><strong>Sauce pans:</strong></td>
<td></td>
</tr>
<tr>
<td>One size only in a unit:</td>
<td>6</td>
</tr>
<tr>
<td>Two different sizes provided in each unit:</td>
<td>18</td>
</tr>
<tr>
<td>Three different sizes provided in each unit:</td>
<td>20</td>
</tr>
<tr>
<td><strong>Frying pans:</strong></td>
<td></td>
</tr>
<tr>
<td>One size only in a unit:</td>
<td>13</td>
</tr>
<tr>
<td>Two sizes provided in each unit:</td>
<td>18</td>
</tr>
<tr>
<td>Three different sizes provided for each unit:</td>
<td>12</td>
</tr>
<tr>
<td><strong>Double boilers:</strong></td>
<td></td>
</tr>
<tr>
<td>One size only recommended:</td>
<td>40</td>
</tr>
<tr>
<td>Two different sizes provided in each unit:</td>
<td>3</td>
</tr>
<tr>
<td><strong>Muffin tins:</strong></td>
<td></td>
</tr>
<tr>
<td>One size only:</td>
<td>43</td>
</tr>
<tr>
<td><strong>Egg beaters:</strong></td>
<td></td>
</tr>
<tr>
<td>One type only in each unit:</td>
<td>37</td>
</tr>
<tr>
<td>Two types provided in each desk:</td>
<td>6</td>
</tr>
</tbody>
</table>

#TT—Teacher trainers; SS—State supervisors; CS—City supervisors.

Of the 107 persons checking this part of the questionnaire, Table 18 shows that 45 homemaking education leaders would have two different sizes of sauce pans and 52 other persons would have three different sizes of sauce pans in each desk. The sizes suggested
on the questionnaire were: small—less than one quart; medium—one to one and one-half quarts; and large—over one and one-half quarts.

Of the 10 persons referred to in the table as advising only one size, three recommended that all should be small, three recommended that all should be medium size, and four advised that all the sauce pans should be larger than one and one-half quarts.

Of the 45 educators indicated on Table 18 who advised two different sizes, 28 recommended both the small and the medium sizes, while 17 advised the medium and large sizes.

One hundred homemaking education leaders expressed opinions on the number of different frying pans that should be placed in the units. Thirty-three persons, Table 18 shows, would have only one size frying pan in the units. Of these, 24 persons would have the medium size only, five others would have the large size only, and four persons would use only the small frying pans in the units.

Forty-six homemaking educators, shown on Table 18, indicated two sizes in frying pans in each unit, 19 persons advised both small and medium, and 22 persons recommended medium and large sizes as being most serviceable in the unit kitchens. Twenty-one educators believed that there should be three different sizes of frying pans in each unit.

No person indicated that there should be more than two sizes of double boilers provided in each unit kitchen. Sixty homemaking educators advised only one size for each unit, with 32 of these persons recommending only the one quart size, sixteen persons preferring one to two-quart size, and 25 persons did not indicate any size. The four persons recommending that two sizes of double boilers should be put in
the unit kitchens, see Table 18, believed these should be one-quart and two-quart sizes.

No one recommended that there should be more than one size for muffin tins. Sixty-nine of the 70 persons expressing their opinions stated no size other than the size suggested on the questionnaire—8-muffin; one person preferred the 4-muffin size. It must be recognized that the fact that only the 8-muffin size was listed on the questionnaire and no space was provided for additional sizes to be specified, alters the significance of the above figure relative to the size of muffin tins.

Table 18 shows that seventy-two homemaking education leaders expressed their judgment regarding types and numbers of egg beaters to be provided in each unit kitchen. Of the 64 shown on Table 18 as indicating one type only, two persons specified the rotary; the other 62 made no reference to type. The 8 persons shown on the table as recommending two types believed that there should be both a wire and a rotary type provided in each unit.

The Number Recommended for Each Different Size of Utensil

After the many different sizes of utensils were tabulated together with the number of each that these teacher trainers, state supervisors, and city supervisors specified, it appeared significant to ascertain how many times various numbers of each size were indicated. A table was devised in which the different numbers of the varying sizes could be recorded. Note Table 19 for this information.
TABLE 19

The Number Recommended of Each Different Size of Utensil

<table>
<thead>
<tr>
<th>Articles of Equipment and the Number Recommended for Each Different Size</th>
<th>Number of Times Given by Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT#</td>
</tr>
<tr>
<td><strong>Sauce Pans:</strong></td>
<td></td>
</tr>
<tr>
<td>Small size (smaller than 1 quart):</td>
<td></td>
</tr>
<tr>
<td>One provided for each unit kitchen:</td>
<td>12</td>
</tr>
<tr>
<td>Two provided for each unit kitchen:</td>
<td>11</td>
</tr>
<tr>
<td>Four provided for each unit kitchen:</td>
<td>1</td>
</tr>
<tr>
<td>Medium size (1 to 1½ quarts):</td>
<td></td>
</tr>
<tr>
<td>One provided for each unit kitchen:</td>
<td>18</td>
</tr>
<tr>
<td>Two provided for each unit kitchen:</td>
<td>10</td>
</tr>
<tr>
<td>Four provided for each unit kitchen:</td>
<td>0</td>
</tr>
<tr>
<td>Large size (larger than 1½ quarts):</td>
<td></td>
</tr>
<tr>
<td>One provided for each unit kitchen:</td>
<td>14</td>
</tr>
<tr>
<td>Two provided for each unit kitchen:</td>
<td>5</td>
</tr>
<tr>
<td><strong>Frying Pans:</strong></td>
<td></td>
</tr>
<tr>
<td>Small size (smaller than 6 inches):</td>
<td></td>
</tr>
<tr>
<td>One provided for each unit kitchen:</td>
<td>13</td>
</tr>
<tr>
<td>Two provided for each unit kitchen:</td>
<td>1</td>
</tr>
<tr>
<td>Medium size (6 to 8 inches):</td>
<td></td>
</tr>
<tr>
<td>One provided for each unit kitchen:</td>
<td>18</td>
</tr>
<tr>
<td>Two provided for each unit kitchen:</td>
<td>7</td>
</tr>
<tr>
<td>Large size (larger than 8 inches):</td>
<td></td>
</tr>
<tr>
<td>One provided for each unit kitchen:</td>
<td>14</td>
</tr>
<tr>
<td><strong>Double Boilers:</strong></td>
<td></td>
</tr>
<tr>
<td>Small size (1 to 1½ pints):</td>
<td></td>
</tr>
<tr>
<td>One provided for each unit kitchen:</td>
<td>0</td>
</tr>
<tr>
<td>One quart size:</td>
<td></td>
</tr>
<tr>
<td>One provided for each unit kitchen:</td>
<td>9</td>
</tr>
<tr>
<td>Two provided for each unit kitchen:</td>
<td>1</td>
</tr>
<tr>
<td>Medium size (1 to 1½ quart size):</td>
<td></td>
</tr>
<tr>
<td>One provided for each unit kitchen:</td>
<td>4</td>
</tr>
<tr>
<td>Two provided for each unit kitchen:</td>
<td>3</td>
</tr>
<tr>
<td>Two-quart size:</td>
<td></td>
</tr>
<tr>
<td>One provided for each unit:</td>
<td>1</td>
</tr>
<tr>
<td>No size indicated:</td>
<td></td>
</tr>
<tr>
<td>One provided for each unit kitchen:</td>
<td>8</td>
</tr>
<tr>
<td>Two provided for each unit kitchen:</td>
<td>3</td>
</tr>
</tbody>
</table>
A study of Table 19 shows that of the 103 teacher trainers, state supervisors, and city supervisors checking this phase of the questionnaire, 71 recommended some small sauce pans to be put in the unit kitchens. Thirty of these persons advised only one small sauce pan for each unit kitchen; thirty-three persons recommended that there should be two small sauce pans in each unit; while 8 other educators indicated that there should be 4 small sauce pans to each unit kitchen. There was one teacher trainer who recommended 3 small sauce pans for each unit kitchen.
To peruse the table further, it is seen that 74 of these 103 homemaking educators believed that there should be some medium size sauce pans in the units. They were very evenly divided regarding whether to have one or two of this size in the units, with 39 recommending each number for each unit kitchen. Five state and city supervisors believed that there should be 4 of the medium size sauce pan in each unit kitchen. One state supervisor advocated three medium size sauce pans for each unit.

Table 19 shows that fewer were in favor of the larger size sauce pan, but 61 persons believed that there should be one or two in each unit. One city supervisor stated that there should be three large size sauce pans for each unit kitchen.

Concerning frying pans, Table 19 shows that 40 homemaking educators approved of the small size with 27 persons recommending one for each unit, thirteen advising two small frying pans to the unit. Three persons advocated that there should be 4 small size frying pans in each unit kitchen.

Of the 103 teacher trainers, state supervisors, and city supervisors, 74 would have the medium size frying pan in the units, 52 of whom would have only one, 20 would have two for a unit, and two city supervisors would have 4 of the medium size frying pans in each unit kitchen.

Again, fewer advocated the large size, however, 43 would wish to provide some of this size in the units. Forty-one of these leaders would have only one of the large size frying pan provided for each unit kitchen. One state supervisor and one city supervisor would
have two of this large size in each unit. No one would have more than two frying pans larger than 3 inches in the unit kitchens.

In respect to the double boiler, more variance in size may be noted on Table 19. Perhaps this is due to the fact that no size was indicated on the questionnaire, and space was allowed wherein a size could be specified.

Table 19 shows that the smallest size recommended was 1 to 1\(\frac{1}{2}\) pints, and this size was indicated by 5 state and city supervisors who believed that there should be one in each unit kitchen. One state supervisor would have two in a unit.

As Table 19 indicates, the one-quart size was considered more serviceable, with 30 persons recommending this size. Of these, 18 of these homemaking educators would have only one of the one-quart size per unit, while 12 persons would have two in a unit. One city supervisor would have three of this one-quart size in each unit, and one state supervisor would have four one-quart double boilers in each unit kitchen.

The medium size of 1 to 1\(\frac{1}{2}\) quarts was popular with 15 persons, as Table 19 shows. Five of these educators advocate only one, and 6 persons wanted two of this medium size double boiler in the units. One city supervisor would have four per unit of the 1 to 1\(\frac{1}{2}\) quart size double boiler.

Table 19 shows that 7 teacher trainers and city supervisors favored the two-quart size, but only one for each unit kitchen was recommended by any person checking the questionnaire.

Twenty-four persons did not indicate any size for double boilers,
and three teacher trainers and state supervisors listed "family size" which was tabulated with the "no size indicated." Since it was important to consider the numbers recommended in each unit, figures for this group were included on the table; seventeen persons advised one double boiler for each unit, five advocated two per unit, and two believed that there should be four double boilers in each unit kitchen.

The size suggested on the questionnaire for muffin tins (8-muffin) was generally accepted, with 81 recommending that size. Fifty-two of the persons advised only one muffin pan to a unit kitchen, while twenty-nine said that there should be two for each kitchen. One city supervisor advocated two of a 4-muffin size in each unit kitchen.

Seventy-one homemaking education leaders, Table 19 shows, did not indicate any type relative to egg beaters. However, 28 of these persons believed that there should be one egg beater in each kitchen; thirty-four believed that there should be two beaters per unit kitchen. One teacher trainer advised having three in each unit. Of those who specified the type, 13 recommended one rotary or dover, 10 persons advised one wire egg beater in the units, and 5 educators would have one of two different types of egg beaters in each unit kitchen. One person made mention of size relative to egg beaters. This city supervisor, not shown on the table, advised one small and one large size egg beater in each unit kitchen.

It is evident that with all utensils, one or two of a size in each unit kitchen seemed most desirable by a large majority of these homemaking educators.
Number of Different Sizes of a Single Utensil Recommended

The preceding analysis relative to the number of different sizes of utensils that these homemaking educators recommend, brings one to the question of how many different sizes of one kind of utensil is advisable for one unit kitchen. Table 20 shows what these 103 homemaking education leaders indicated.

**TABLE 20**

<table>
<thead>
<tr>
<th>Number of Different Sizes of a Single Utensil Recommended for One Unit Kitchen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Different Sizes</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>One size only of a single utensil:</td>
</tr>
<tr>
<td>One or two sizes in each utensil:</td>
</tr>
<tr>
<td>Two sizes in all utensils:</td>
</tr>
<tr>
<td>Variations of one to four different sizes in the various utensils:</td>
</tr>
<tr>
<td>Total number of persons tabulated:</td>
</tr>
</tbody>
</table>

#TT-Teacher trainers; SS-State supervisors; CS-City supervisors.

One hundred five teacher trainers, state supervisors and city supervisors gave sufficient information to enable the investigator to determine the degree of variation in size that they would recommend in a single piece of equipment. Twenty-eight educators consider that one size for each utensil is sufficient. Fifty-four others believe that, with some utensils, at least, two different sizes should be
provided in each unit kitchen. Nine persons indicated that there should be two different sizes provided for each utensil, and fourteen educators would have as many as four different sizes in some utensils provided in the unit kitchens.

**Number of a Single Utensil Provided in Each Unit Kitchen**

In order to gain some impression of the amount of equipment each unit kitchen would have, the investigator ascertained the total number of different utensils recommended. Table 21 shows the quantity of each utensil recommended for the unit kitchen.
<table>
<thead>
<tr>
<th>Utensils and the Number Recommended</th>
<th>Number of Times Given by TT#</th>
<th>SS</th>
<th>CS</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sauce pans:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One sauce pan for each unit kitchen:</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Two sauce pans for each unit kitchen:</td>
<td>12</td>
<td>4</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Three sauce pans for each unit kitchen:</td>
<td>12</td>
<td>3</td>
<td>7</td>
<td>22</td>
</tr>
<tr>
<td>Four sauce pans for each unit kitchen:</td>
<td>13</td>
<td>8</td>
<td>8</td>
<td>29</td>
</tr>
<tr>
<td>Five sauce pans for each unit kitchen:</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Six sauce pans for each unit kitchen:</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Seven, eight, or nine sauce pans per unit:</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td><strong>Frying pans:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One frying pan for each unit kitchen:</td>
<td>12</td>
<td>3</td>
<td>7</td>
<td>22</td>
</tr>
<tr>
<td>Two frying pans for each unit kitchen:</td>
<td>13</td>
<td>6</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>Three frying pans for each unit kitchen:</td>
<td>11</td>
<td>0</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Four frying pans for each unit kitchen:</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Five or six frying pans for each unit kitchen:</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td><strong>Double boilers:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One double boiler for each unit kitchen:</td>
<td>30</td>
<td>13</td>
<td>17</td>
<td>60</td>
</tr>
<tr>
<td>Two double boilers for each unit kitchen:</td>
<td>13</td>
<td>6</td>
<td>11</td>
<td>30</td>
</tr>
<tr>
<td>Three or four double boilers for a unit:</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td><strong>Muffin tins:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One muffin tin for each unit kitchen:</td>
<td>29</td>
<td>13</td>
<td>21</td>
<td>63</td>
</tr>
<tr>
<td>Two muffin tins for each unit kitchen:</td>
<td>13</td>
<td>9</td>
<td>11</td>
<td>33</td>
</tr>
<tr>
<td><strong>Egg beaters:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One egg beater for each unit kitchen:</td>
<td>18</td>
<td>6</td>
<td>11</td>
<td>35</td>
</tr>
<tr>
<td>Two egg beaters for each unit kitchen:</td>
<td>26</td>
<td>14</td>
<td>20</td>
<td>60</td>
</tr>
<tr>
<td>Three or four egg beaters for each unit:</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>9</td>
</tr>
</tbody>
</table>

#TT-Teacher trainers; SS-State supervisors; CS-City supervisors.
As is evident from Table 21, many of these homemaking educators (twenty-nine in all) recommend four sauce pans for each unit kitchen, however, two and three are considered advisable by 41 persons. Twenty-one persons, particularly those who believe in equipping units for six pupils, would have five or six sauce pans for each unit kitchen. The small minority of four persons would have only one sauce pan for each kitchen. One state supervisor would have seven sauce pans in each unit; a state supervisor and a city supervisor would each have eight sauce pans in one unit kitchen; and one person from each of the three groups of homemaking educators would advise nine sauce pans for each unit kitchen.

Thirty-eight persons, as Table 21 indicates, advocate providing two frying pans for the units. Twenty-four persons advise having three frying pans per unit, and twenty-two recommend just one frying pan in each unit kitchen. Other opinions were: seven persons would have four; four persons would have five; and four teacher trainers and city supervisors would have six frying pans for each unit kitchen. One state supervisor advocated having seven frying pans in a unit kitchen.

A majority of 60 educators recommend only one double boiler, Table 21 shows, and 30 other persons believe that there should be two double boilers in each kitchen. One city supervisor would have one, seven state and city supervisors would have seven, and one teacher trainer, not recorded on the table, would provide eight double boilers for each unit kitchen.

Of the 99 persons expressing an opinion, 63 education leaders
advise having only one muffin tin in each unit, Table 21 indicates. Thirty-three other persons consider that there should be two muffin tins for each unit, and three teacher trainers and state supervisors believe that four muffin tins in a unit kitchen are advisable.

Of the 104 homemaking education leaders contributing information on this question, 60 recommend two egg beaters for each unit kitchen, Table 21 discloses. Thirty-five other persons believe that only one is sufficient, and eight consider that four egg beaters are desirable in each unit kitchen. One teacher trainer recommended three beaters to each unit.

Some of the comments which the commentators inserted in the margins and letters accompanying will facilitate further understanding of the present tendencies regarding the selection of small equipment:

A state supervisor says: "Equip as a home kitchen with two extra of dinnerware and silver."

Quoting a state supervisor: "Service for six, as we encourage guests at each meal. The unit kitchen should be comparable to the kitchens of the community, and all equipment should be in family sizes."

To quote a teacher trainer: "The double boiler really is a sauce pan and an inset—then have just one other sauce pan."

A state supervisor recommends that one frying pan be a dutch-oven.

To summarize briefly some of the tendencies expressed by these one hundred three homemaking educators regarding the articles of equipment to be stored within the unit kitchens, it seems that articles of dinner and silver ware are associated with different
functions than are the utensils for preparing meals, and are not to be planned jointly in respect to sizes and quantities.

Different sizes of utensils are advised, with a majority recommending two or three sizes in sauce pans, one or two sizes of frying pans, and a few advocating two different sizes of double boilers.

It seemed apparent that these educators would provide two or more of several sizes of utensils in some instances. They would have one or two small size sauce pans, one or two medium size, and one large sauce pan, in a majority of the cases. In respect to frying pans and double boilers they would have fewer numbers of the different sizes which they recommend. Many of these homemaking education commentators would have two of one size muffin tin, and two egg beaters for each unit kitchen. Some of the educators specified different type egg beaters.

Many persons believed that one size only of a single utensil was sufficient, but the majority would have at least two different sizes in many articles of equipment. A notable number of persons would have as many as four different sizes in one utensil.

The total number of a single utensil for each unit kitchen varied from one to nine, with a majority desiring four sauce pans, two frying pans, one double boiler, one muffin tin, and two egg beaters. A large percentage recommend two or three sauce pans, three frying pans, two double boilers, two muffin tins, and one egg beater.
Articles of Equipment to be Stored Elsewhere in the Room

As the section relative to equipment for the unit kitchens was analyzed, the opinions relative to the other equipment in the foods room was studied to ascertain any degree of relationship which existed between the two. For the most part, it seemed that the person checking the questionnaire was not as much concerned with supplementing unit kitchens as she was in providing for functions of the foods equipment other than class work. Usually the unit kitchens were planned to be as adequate as the average home kitchen, and needed little if any supplementary equipment stored out in the foods room. Accepting this attitude, the equipment listed for the room other than that in the unit kitchens was treated independently. (See Appendix, p. 255.)

Fifty-five persons recommended that some dinner or supper plates be stored in the foods room. Six persons stated that there should be only two plates stored in the room out of the units. Twenty-three persons recommended a set of twelve, and 11 persons suggested that it was advisable to have a set of 6 plates available in the room. Six persons advised a set of 8.

Sixty persons believed that there should be some cups and saucers stored in the foods room other than those which would be stored in the units. Here again, a set of twelve was recommended by the most persons, with 21 advising that number. Thirteen educators suggested 6. Six persons recommended two, and six others stated that 24 were necessary. The other persons recommended numbers ranging from two
to 76. Five persons suggested a set of eight.

As to the amount of silverware which these educators would store out in the foods room, 55 teacher trainers, state supervisors, and city supervisors would have some silver knives available out in the room. A set of 12 was again most popular with 23 persons recommending the number, and a set of six was next in preference, with 15 persons suggesting this many knives. The same five persons who recommended eight of plates and cups and saucers advised eight knives as well. The other persons continued to recommend quantities ranging from two to 76.

The recommendations for forks paralleled those made for knives. Twenty-seven persons recommended a set of 12; eight educators recommended a set of 6; six other persons advised a set of 8; and four persons advised sets of two or four forks. All the other commentators suggested numbers varying from 2 to 76.

Concerning kitchen utensils, 31 education leaders would have sauce pans smaller than one quart, 66 would have sauce pans one to 1½ quarts in size, and 32 advised sauce pans larger than 1½ quarts to be stored out in the room. Of the smallest size, 9 persons recommended six to be available out in the room, seven persons advised three or four, six persons would have one or two, five persons would have four, and four persons would have twelve sauce pans smaller than one quart available out in the room.

Of the 66 persons preferring the one to 1½ quart sauce pan, 19 persons would have six available out in the room, 13 other persons recommended only one to be out in the room, 12 persons advised four,
eleven persons suggested two, six educators listed three, and five persons would have twelve 1-1/4 quart sauce pans available in the room other than the ones stored within the units. Other individuals gave such numbers as five, eight, and ten.

Twelve of the 32 persons who prefer the large size sauce pan would have six of them stored out in the room, five persons recommended one and two, and eight persons would have four to six of the large size sauce pan stored out in the room.

Nine educators would have frying pans which are smaller than 6 inches stored out in the room, 21 persons recommended frying pans which are 6-8 inches, and 55 educators advised frying pans which are larger than 8 inches. Of those preferring the smallest size, six persons would have two, while three persons would have six or twelve. Among those persons advising the medium size frying pan, ten recommended just one or two of them, six persons would want three or four of them, and five persons advised that six of the smallest sized frying pan were to be stored out in the foods room.

A majority of the educators would prefer to have the largest size frying pan stored out in the room. Twenty-two persons would have two of this size frying pan stored within the room in addition to those within the units. Twelve persons would recommend three or four to be available.

Concerning double boilers, many did not state any desired size, but three persons believed that there should be three double boilers of some size available within the room in addition to the number stored within the units. Two other persons stated that there should
be one double boiler, and two educators would have four double boilers available out in the foods room. Of the one-quart size, five persons would provide six to be stored out in the room. Thirteen persons would have double boilers of two-quart size available out in the room in addition to those stored within the units—five persons would have only one, five persons would have two or three, and three others would have four or six of the two-quart size double boiler stored out in the room. Ten persons would have one or two double boilers larger than two quarts—sizes suggested being 3-quarts, 4-quarts, 10-quarts, and 16-quarts.

The 8-muffin tin was the most popular size with 40 persons recommending this size and only one person preferring to have six of a 4-muffin size. Of those who advised the 8-muffin size, 15 persons favored having six of them available out in the foods room. Eight persons would have four of them available, 7 persons recommended either two or three, six persons suggested having twelve of this size muffin tin available, and four persons would have only one muffin tin provided in addition to those stored within the units.

Twenty-six educators who did not specify any type in particular indicated that they would have extra egg beaters stored out in the room. Fifteen persons would have six extra beaters available, eight persons advised having four, seven educators recommended providing two or three, six persons desired twelve extra beaters available in the foods room, and four persons believed that just one extra egg beater stored in the room, in addition to those which were stored within the units, would be sufficient. Nine persons stated specific
types of beaters. Four educators recommended that there be some
dover or rotary beaters available out in the foods room in addition
to those stored in the units. Two persons believe that there should
be some wire or whisk egg beaters provided.

Some of the comments which the homemaking education leaders
volunteered aid in understanding the factors to be considered when
planning equipment to be stored in a foods room in addition to that
which will be put in the units:

Teacher trainers stated:

"It depends on how much is done for social life of
the school."

"Some large equipment is needed if banquets are
served. Extra silver depends on the school situation."

"I would want frying pans which are larger than eight
inches, a deep cooker type frying pan, and larger
size muffin tins for cup cakes, etc."

"The extra equipment which would be needed depends on
the size of the groups which are to be served. If a
school lunch program, or if the room is used for serving
many banquets, etc., might need enough equipment to
serve 100 persons or more."

As the comments point out, these homemaking education leaders
believe that the amount of equipment which should be stored in the
foods room in addition to that which is stored within the units,
depends on the specific school situation; however, a few generalities
may be drawn from the findings from this study. According to a
majority of the commentators, a set of twelve in dinnerware and in
silverware is advisable, although sets of six were recommended by

1/Original tables showing complete data on file in Home Economics
   Education Office, Oregon State College.
many persons and would appear to be next to be desired. Individuals recommended quantities varying from two to seventy-six, but numbers two, four, and eight were listed more frequently than other quantities. The individual recommendations and the wide range suggested emphasize the fact that it would be deceiving to make any blanket statement covering the quantity of serving equipment to be stored out in the foods room because each individual school situation presents its own needs.

As to kitchen utensils the decisions ranged more widely. The medium size sauce pan of 1-1\(\frac{1}{2}\) quarts was the most popular. The small and the large size sauce pan met with about the same favor. Different educators recommended from one to twelve of the various sizes, but six of any one size was suggested most frequently.

The large size frying pan, larger than 8 inches, was decidedly the most favored with these teacher trainers, state supervisors and city supervisors. Of this size the largest number of persons would provide two of them. The medium size was next to be desired and the commentators would have one or two of this size. The persons who would prefer to have the small size frying pan would have two of them provided in the foods room in addition to those stored within the units.

In general, it may be assumed from the expressed judgments of 130 homemaking education leaders that sets of six to twelve in dinnerware and silverware are desirable. Of the kitchen utensils, six medium size sauce pans, two large size frying pans, one or two medium size double boilers, six 8-muffin tins, and six extra egg beaters
would be desirable. They further suggest that two to six of the basic pieces of equipment might very advisedly be stored out in the foods room in addition to the number which would be stored within the units.

The Number of Pupils for Whom to Plan in Each Unit

When the sketches and plans of foods rooms were studied, recognition was given to instances where the commentators specified the number of pupils which should be planned for in each group. A group of four pupils was indicated as being advisable by a large majority of the educators. This data was not considered sufficiently valid, however, since the information in that part of the study was volunteered and many of the annotators did not mention this angle of the question. It seemed significant to have one specific question dealing with the size of working groups in order to ascertain some definite conclusion concerning the size of group which would be most effective. Therefore, one part of the section dealing with equipment treated this problem. Responses to this question are recorded in condensed form in Table 22, following.
TABLE 22

Opinions Relative to the Size of Groups
For Which to Plan in the Units

<table>
<thead>
<tr>
<th>Affirmative and Negative Opinions</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT</td>
</tr>
<tr>
<td>If funds were available, would you plan a unit kitchen for each two pupils rather than one for four pupils?</td>
<td></td>
</tr>
<tr>
<td>Yes:</td>
<td>10</td>
</tr>
<tr>
<td>No:</td>
<td>37</td>
</tr>
<tr>
<td>This item not checked on the inquiry:</td>
<td>7</td>
</tr>
<tr>
<td>Total number of persons represented:</td>
<td>54</td>
</tr>
</tbody>
</table>

Reasons Given

Advantages in having two pupils in each group:

1. Gives more opportunity for individual work: 4 0 0 4
2. More nearly a homelike situation: 0 0 3 3

Advantages in having four pupils in each group:

1. It is unnecessary to plan for less than four: 3 1 1 5
2. The family of 4 or 5 is more normal: 11 7 5 23
3. May work in smaller groups if desirable anyway: 5 2 1 8
4. Four girls work well together: 8 3 6 17
5. To plan for groups of less than four is too expensive for the returns: 7 6 0 13

#TT-Teacher trainers; SS-State supervisors; CS-City supervisors.
A survey of the opinions of 113 teacher trainers, state supervisors, and city supervisors as recorded in Table 22 shows that 78.8 per cent of these educators would prefer to plan for groups of four pupils, while 21.2 per cent of them would prefer to have just two pupils in each group.

The reasons which were given for recommending groups of four regardless of the availability of funds indicate that since this size group is more nearly like the family group it is more effective; four girls work well together; it is more economical to plan for four in a group than for two; and it is unnecessary to plan for less, since they may work in smaller groups when advisable anyway. Nine educators asserted that a grouping of four pupils put more emphasis on the family meals. Two state supervisors stated that it should encourage a family situation, and two teacher trainers and one city supervisor believed that pupils should get experience in cooking for four, which is the average size family.

These education leaders believed that four girls work well together, and greater values are derived from planning in groups of four than in groups of two because they must learn from group co-operation, and the co-operation is better. Furthermore, they state that the pupils work better in larger groups since four are needed to prepare a whole meal in the time allotted.

Thirteen educators, Table 22 verifies, regard the groups of two to be impractical and too expensive for the returns to be derived. Such comments as these express this attitude: 'I would rather have the money in more space and for other things, such as books, etc.,'
and "Too large proportion of any school budget; there are other departments in the school."

Eight persons pointed out that when the units are planned for four, they may be used for smaller groups as well. Two teacher trainers expressed the belief that large spaces are better than smaller areas because they do not get so cluttered.

The reasons given by the 24 persons who preferred having groups of two pupils were that this plan gives more opportunity for individual work and is more nearly a homelike situation since families are smaller now. In giving more opportunity for individual work, they asserted, each pupil gets more actual individual practice and experience, there is more opportunity for taking responsibility in managerial problems.1/

To summarize the opinions of 113 homemaking educators, it appears that groups of four pupils are more advisable than groups of two, because this number more nearly represents the typical family, four girls work well together, it is more economical, such an arrangement may be used for smaller groups when necessary, and it provides the advantages of larger working spaces and less confusion in supervision. The persons who recommend groups of two believe that this gives more opportunity for individual work and more nearly typifies the present family, since family groups are decreasing in size.

1/ Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
Similarity or Variations in Equipment

In the Different Units

When one is equipping unit desks or unit kitchens the question always arises as to whether the same equipment should be in all the units or whether the equipment in the different units should vary. It seemed to the investigator that the thinking of the present leaders of homemaking education concerning this question should be ascertained. Consequently, the final question in the section of this study which investigated articles of equipment was: should each unit kitchen have the same equipment? The responses to this question have been analyzed and recorded in Table 23.
TABLE 23

Similarity or Variations in Equipment
In the Different Units

<table>
<thead>
<tr>
<th>Affirmative or Negative Opinions</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT</td>
</tr>
<tr>
<td>Should each unit kitchen have the same equipment?</td>
<td></td>
</tr>
<tr>
<td>Yes:</td>
<td>5</td>
</tr>
<tr>
<td>No:</td>
<td>46</td>
</tr>
<tr>
<td>This item not checked on the inquiry:</td>
<td>3</td>
</tr>
<tr>
<td>Total number of persons represented:</td>
<td>54</td>
</tr>
</tbody>
</table>

Reasons Given

Advantages of having the units differ

1. Provides additional variety of experiences:
   a. A variety allows pupils to learn to use, to study, and to evaluate different kinds of equipment: 20 10 20 50
   b. Provide different equipment in kitchens and rotate girls: 2 3 2 7

2. Opportunity for comparison:
   a. Consumer buying studies: 20 10 17 47

3. Equipment should be selected on standards: 2 2 0 4

4. Equipment should reproduce conditions in the community:
   a. Vary to meet different income levels: 16 6 3 25
   b. Vary to meet different home conditions; social levels: 0 0 2 2
The tabulated opinions of 115 homemaking education leaders as seen in Table 23 reveals that 81.7 per cent recommend that the equipment in the units differ, while 18.3 per cent of the educators see more advantages in having the equipment in the units the same.

The reasons given for advising variations in equipment within the units indicate that such a plan provides additional variety of experiences in using, studying, and evaluating the different kinds of equipment through rotation of activities; it gives the pupils more opportunity for comparison in consumer buying studies; it provides situations in which different standards of equipment may be exhibited; and differing conditions in the homes may better be exemplified.

TABLE 23 (Continued)

<table>
<thead>
<tr>
<th>Reasons Given</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT#</td>
</tr>
<tr>
<td>Advantages of having the units identical:</td>
<td></td>
</tr>
<tr>
<td>1. Easier for the teacher:</td>
<td></td>
</tr>
<tr>
<td>2. Each unit kitchen should have the equipment necessary in a well equipped home kitchen; minimum equipment the same:</td>
<td></td>
</tr>
<tr>
<td>a. Basic equipment can be used in any preparation:</td>
<td></td>
</tr>
<tr>
<td>3. Extra equipment should be stored elsewhere:</td>
<td></td>
</tr>
<tr>
<td>4. In general, units should be equipped alike:</td>
<td></td>
</tr>
</tbody>
</table>

#TT-Teacher trainers; SS-State supervisors; CS-City supervisors.

1/Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
Table 23 shows that fifty homemaking educators consider that variations in equipment provides experiences in using and studying different materials, different qualities, sizes, shapes, types, and amounts of equipment. Two teacher trainers recognized greater opportunity for teaching care of equipment. Further study of Table 23 discloses that 47 teacher trainers, state supervisors, and city supervisors recognize more opportunity for comparison in consumer buying studies in respect to cost, serviceability, colors, sizes, types, and quantity. Four teacher trainers and state supervisors recommended that different standards be represented in the equipment provided having a minimum, an average, and a complete selection demonstrated. The tabulated evidence indicates that these homemaking educators believe that the equipment should vary in order to reproduce the conditions in the community considering the various income levels and social levels. Five teacher trainers, four state supervisors, and four city supervisors stated that variations in the cost of the equipment should be demonstrated. Two teacher trainers considered that variations in the equipment made for more interesting color schemes and permitted more self expression in the classroom. Eight persons briefly declared that it just was not necessary to have all the units alike.

The main reason given by the minority who recommended that the units be equipped identically was that such an arrangement makes it easier for the teacher to give unified directions. One state supervisor and two city supervisors considered the similarity in equipment to be necessary when pupils have definite time limitations, otherwise
confusion results. Five teacher trainers and one city supervisor con-
sidered that the units should be alike in general type, pieces, amount, and income level. Four educators believed that the units should be alike in that they should have the equipment necessary in a well
equipped home kitchen, that is, the minimum equipment of a home of average means. Four teacher trainers stated that the minimum equip-
ment would be the same and this basic equipment could be used in any preparation, thus eliminating any necessity for varying the equipment. One teacher trainer and one state supervisor recommended that the units be the same and the extra equipment be stored elsewhere in the room.

Some of the comments forthcoming from city supervisors express differing attitudes concerning the question of varying the equipment in the units: "Our standard for each unit has been that of the middle class family," and "The decision would depend on the methods used. There are advantages both ways."

To summarize briefly, the reactions of 115 teacher trainers, state supervisors, and city supervisors relative to the question of equipping the units similarly, it may be said that a majority, 81.7 per cent, believe that the equipment in the units should differ. The reasons given for this decision were that such a plan provides additional variety of experiences in using, studying, and evaluating the different kinds of equipment through rotation of activities; it gives the pupils more opportunity for comparison in consumer buying studies; it provides situations in which different standards of equipment may be exhibited, and differing conditions in the homes may better be exemplified, particularly with respect to different
social levels.

The main reason given by the minority of 18.3 per cent who recommended that the units be the same was that such a plan makes it easier for the teacher to give unified directions. The limited time allotment, the inefficiency of junior high pupils, and the standard of minimum equipment for the average home were given as reasons for equipping the units similarly. It was pointed out that the methods used would determine whether the units should be alike.

Summary of Opinions Concerning the Selection of Small Equipment

An analysis of the judgments expressed by 131 homemaking educators indicates that opinions vary widely and any common standard for equipment would be difficult to ascertain. However, some general tendencies seem evident. It appears that articles of dinner and silverware are associated with different functions than are the utensils for preparing meals, and not to be jointly planned as far as sizes and quantities.

When considering the articles of equipment to be stored within the units, different sizes of utensils are advised, with a majority recommending two or three sizes in sauce pans, one or two sizes of frying pans, and a few advocating two different sizes of double boilers.

It seemed apparent that these educators would provide each unit with two or more of several sizes of utensils. They would have one or two small size sauce pans, one or two medium size, and one large
sauce pan, in a majority of cases. In respect to frying pans and double boilers, they would have fewer numbers of the different sizes which they recommend. Many of these homemaking education commentators would have two of one size muffin tin, and two egg beaters for each unit kitchen. Some of the educators specified different type egg beaters.

Some persons believed that one size only of a single utensil was sufficient for the units, but the majority would have at least two different sizes in many articles of equipment. A notable number of persons would have as many as four different sizes in one utensil for each work unit.

The total number of a single utensil for each unit kitchen varied from one to nine, with a majority desiring four sauce pans, two frying pans, one double boiler, one muffin tin, and two egg beaters; but many of these educators recommend two or three sauce pans, three frying pans, two double boilers, two muffin tins, and one egg beater.

In general, it may be assumed from the expressed judgments of 131 homemaking educators relative to the equipment to be stored in the room other than in the units, that sets of six to twelve in dinner ware and silverware are desirable. Of the kitchen utensils, six medium size sauce pans, two large size frying pans, one or two medium size double boilers, six 8-muffin tins, and six extra egg beaters would be desirable stored in cabinets in the room. These educators suggest further that two to six of the basic pieces of equipment might very advisedly be stored out in the foods room in addition to the number which would be stored within the units.
It may be concluded from the expressed judgments of 113 homemaking educators that groups of four pupils are more advisable than groups of two because this number more nearly represents the typical family, four girls work well together, it is more economical, such an arrangement may be used for smaller groups when necessary, and it provides the advantages of larger working spaces and less confusion in supervision. The persons who recommend groups of two believe that this gives more opportunity for individual work and more nearly typifies the present family, since family groups are decreasing in size.

To the inquiry of whether these homemaking education leaders would put the same equipment in all the units, a majority of 115 persons responding believed that the equipment in the units should differ. The reasons given for this decision were that such a plan provides additional variety of experiences in using, studying, and evaluating the different kinds of equipment through rotation of activities; it gives the pupils more opportunity for comparison in consumer buying studies; it provides situations in which different standards of equipment may be exhibited; and differing conditions in the homes may better be exemplified, particularly with respect to different social levels.

The main reason given by the minority of homemaking educators who recommended that the units be the same was that such a plan makes it easier for the teacher to check, to keep equipment in place, and to give unified directions. The limited time allotment, the inefficiency of junior high school pupils, and the standard of minimum equipment
for the average home were given as reasons for equipping the units similarly. It was pointed out that the methods used would determine whether the units should be equipped alike.

Some of the volunteered comments concerning the selection of equipment suggest the complexity of the problem:

A Head of a Department of Home Economics at one of the State Teachers' Colleges says: "I think there is no hard and fast rule that can be set up for what is best for equipment. It should be adapted to the particular situation...."

One Professor of Home Economics Education at a State College writes: "The Home Economics equipment should be as homelike as possible, should make possible the teaching of a broad course in Home Economics, should make possible the carrying on of homemaking activities much as they are done at home, should be in keeping with the economic level of the community, should be such that good and up-to-date methods and procedures of teaching and learning can be followed."

A state supervisor from the South writes: "We in the South still teach many children whose fuel comes from the farm. Therefore, we advocate different types of fuel including wood, or coal, oil, gas or electricity, with home-built and commercial equipment in addition. It has been our policy to work with the local teacher in equipping the department, since she is familiar with the needs of the community through her survey and home visits. Due to low incomes, we find that much equipment is still purchased from the five and ten and less expensive establishments."

A state supervisor from one of the western states remarks: "My idea of applying for equipment for the various schools is first to definitely plan a broad homemaking program, to be adapted to the schools of various sizes, economic levels, etc., and then to plan equipment which will take care of as many as possible of the important aspects of this program."

A city supervisor expressed the following view: "The background of the student, home environment, etc., have quite a definite bearing on the matter of selecting equipment."
CHAPTER VII

PRACTICES IN TEACHING FOODS

The practices which are used in teaching necessitate certain physical facilities, and likewise, the physical plant determines, to varying degrees, the practices which may be used. Recognizing this close interdependence, and since no information is available regarding the most advantageous size for classes or working groups, it was decided to investigate this factor in this study. Questions were asked concerning the size most desirable for class groups, the most advantageous number for working groups during meal service lessons, and the advisability of providing equipment for the preparation of a single food.

Some of the general remarks relative to the practices used in teaching foods will bear evidence to the degree of consideration being given to this problem.

A state supervisor from New York state comments: "We feel that about four people would be the maximum for cooking in a home kitchen or a unit kitchen. I feel that six people might enter into a family and prepare food if the kitchen is large enough. I cannot see any reason why the same equipment should not be used for serving the single dish as that used for the family meals. We feel that the foods work in this state should be on the meal basis and a good many teachers teach on that basis for the grades, the junior high school and the senior high school, although there are, of course, some lessons on single dishes which build up the meals. We are not interested in small equipment for individual cookery. It should all be of the family type as you will notice in the equipment list which I am sending."

Another state supervisor from North Carolina explains: "In working groups, we have advocated four or five to the family with division of work so that each pupil participates
in the preparation and serving of a simple meal. We have advocated twenty-four as the maximum enrollment per class. This varies when there is a large high school."

It is readily recognized that the practices used in the classroom must depend, not only on the physical situation, but on several other factors such as the philosophy of homemaking prevalent in the school and the community, the flexibility of the equipment provided, the teacher, and the school situation.

**Suggestions for the Tabulated Data for Chapter VII**

Each question asked on the questionnaire was considered separately. The affirmative and the negative responses were tabulated, and the comments relative to the opinions were summarized. These questions will be treated individually on the succeeding pages of this chapter.

**MAXIMUM SIZE FOR FOODS CLASSES**

The question which was asked was: Should there be a maximum size for a foods class? If so, what should be this maximum?

Of the 131 questionnaires received from teacher trainers, state supervisors, and city supervisors, 117 expressed their opinions concerning the size of foods classes. A tabulation of these opinions and an analysis of the comments relative to their decisions is shown in Table 24.
TABLE 24

Opinions Relative to a Maximum Size for Foods Classes

<table>
<thead>
<tr>
<th>Affirmative or Negative Opinions</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT#</td>
</tr>
<tr>
<td>Should there be a maximum size for a foods class?</td>
<td></td>
</tr>
<tr>
<td>Yes:</td>
<td>39</td>
</tr>
<tr>
<td>No:</td>
<td>9</td>
</tr>
<tr>
<td>Questionnaires not filled out:</td>
<td>6</td>
</tr>
<tr>
<td>Total:</td>
<td>54</td>
</tr>
</tbody>
</table>

Maximum Numbers Advised for Foods Classes

What should be the maximum for a foods class?

| Fewer than 20 | 4 | 0 | 1 | 5 |
| 20 - 23 inc.  | 5 | 2 | 3 | 10|
| 25 - 30 inc.  | 8 | 6 | 11| 25|
| 32 - 36 inc.  | 5 | 2 | 8 | 15|
| 36 - 40 inc.  | 0 | 0 | 1 | 1 |

#TT-Teacher trainers; SS-State supervisors; CS-City supervisors.

Subscript 1/Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
Of the 117 teacher trainers, state supervisors, and city supervisors who indicated their opinion regarding a maximum number for a foods class, Table 24 shows that 95 were of the opinion that there should be a maximum, and 17 stated that there could not or should not be a maximum specified. Five persons commented on the question, but did not choose to state "yes" or "no." Reasons for declaring themselves affirmatively or negatively indicate that the methods used, the physical plant, the school situation, the character of the classes, and the community determined their decisions.

The 93 indicated on Table 24 as stating what they believed the maximum should be, are grouped most heavily around 24 with 37 persons specifying that the maximum should be no more than 24 pupils. The second largest grouping is in the range of 30 to 32 with 23 homemaking educators indicating these numbers. Usually the small or decidedly large class was recommended by a very few, frequently only one or two persons deviated so widely from the realm of the class of 24 pupils. Seven persons advised that 20 to a class was sufficient and five homemaking education leaders set the maximum at 28 students per class.

As the comments of the two state supervisors quoted at the beginning of this chapter infer, there are too many factors involved to enable them to recommend exact numbers for classes or for working groups. These factors were: the teacher, availability of equipment and space facilities, the type of class, the method of teaching used, the school situation and the community. The experience of the teacher was cited as a determining factor. Twelve persons noted the
importance of suitable equipment and nine others mentioned the size of the laboratory or foods kitchen and other available space as being significant considerations. The experience of the pupils and the character of the pupils in the classes made a difference, they reported. The method of teaching affected the decision of one teacher trainer, in that, if the problem method of teaching was used, no maximum limit for classes was necessary, she believed. The school situation, including the attitude of the administrators, and the length of the period influenced one city supervisor in her decision. The community, the standards of homemaking and the attitude toward the homemaking course were mentioned by one state supervisor as being pertinent.

Twenty-four is a goodly number, but in large areas with ample space and equipment, thirty to forty are well taught, commented a state supervisor; thirty-two with large well planned room, remarked a teacher trainer; thirty-two if equipped for that number.

The city supervisors contended that the number in the class generally could not be controlled by the home economics department. The maximum means nothing, declared one city supervisor, there is a willingness on the part of the administrators to keep the size of the class workable, it is done, but when emergency situations arise this cannot be done. Another city supervisor believed that the foods classes should be in proportion to all classes in any given building. Twenty is desirable, stated one city supervisor, but this cannot be done in most cities.

Other comments relative to the maximum number for foods classes
were: "Not more than 24; often not that large;" "Twenty-four is reasonable, 30 is possible;" "Thirty-two or 36 in senior high school, 24 in junior high." One teacher trainer who specified 28 to 30 as a desirable maximum, commented that "a limit of 24 is desirable."

A phrase which modified many assertions was: "if possible," indicating the uncertainty with which many homemaking educators gripped the matter of limiting numbers in the classes.

It is considered by homemaking educators to be advantageous to have a maximum limit for foods classes. Many factors, out of the hands of the homemaking teacher or supervisor, are very forceful in deciding the number per class, and these factors must be recognized and adjusted. The teacher is an important figure in connection with varying sizes of classes, in that the method which she uses may, or may not be, the most effective procedure to use, the problem method being more adaptable and effective than the unit method when classes are large. The school and the community must be taken into consideration in determining the maximum number for a class.

In general, a class of 24 can carry on the most effective learning experiences, but as many as 32 pupils in one class can work efficiently, suggest these educators.

In any instance, a thorough study of many factors of the homemaking department, the school, the community, and the teacher herself, must be made before a valid decision may be reached concerning the size of foods classes.
SIZE OF GROUPS FOR PREPARING MEALS

The question which was asked concerning the most effective size for the unit groups was: If foods classes are divided into working groups, what size group is most effective when pupils are preparing meals? Space was allowed for comments.

Of the 132 questionnaires received from teacher trainers, state supervisors, and city supervisors, 121 persons expressed their opinions concerning the size of the working units. Table 25 reveals the numbers of persons who stated preferences for some specific number of pupils for the unit groups. The table further tabulates the reasons given for preferring groups of a certain size and the personal opinions growing from the rich and varied experiences of this group of educators.
## TABLE 25

Opinions Relative to the Size of Groups for Preparing Meals

<table>
<thead>
<tr>
<th>Sizes of Groups Recommended</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT</td>
</tr>
<tr>
<td>What size group is most effective when pupils are preparing meals?</td>
<td></td>
</tr>
<tr>
<td>Two to three, inc.</td>
<td>11</td>
</tr>
<tr>
<td>Four pupils to each group:</td>
<td>30</td>
</tr>
<tr>
<td>Four to six, inc.</td>
<td>11</td>
</tr>
<tr>
<td>Six to eight pupils to each group:</td>
<td>0</td>
</tr>
<tr>
<td>Total number of questionnaires filled out:</td>
<td>52</td>
</tr>
<tr>
<td>Questionnaires not filled out:</td>
<td>2</td>
</tr>
<tr>
<td>Totals:</td>
<td>54</td>
</tr>
</tbody>
</table>

### Reasons Given

1. Most effective learning group:
   a. Four pupils to each unit:
      (a) "Four pupils would probably com-prise the most effective work-ing group from the standpoint of use of equipment and space and naturalness of situation:"
      
      |      | TT | SS | CS | Totals |
      |      | 4  | 3  | 2  | 9      |
      (b) "With four, duties can be better distributed:"
      
      |      | 0  | 1  | 1  | 2      |
      (c) "Four is a sufficient number for getting all responsibilities done in the short time allotted:"  
      
      |      | 1  | 1  | 7  | 9      |
      (d) "With four, each girl gets more individual experience:"  
      
      |      | 2  | 4  | 4  | 10     |
      (e) "With group of 4 there is more opportunity for co-operation:"
      
      |      | 2  | 1  | 2  | 5      |
   b. Two pupils to each group:  
      
      |      | 3  | 1  | 2  | 6      |
TABLE 25 (Continued)

<table>
<thead>
<tr>
<th>Reasons Given</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT#</td>
</tr>
<tr>
<td>(a) &quot;Two provide an opportunity for management problems to be executed:&quot;</td>
<td>2</td>
</tr>
<tr>
<td>c. &quot;Three is best, allows for more individual development and supervision:&quot;</td>
<td>2</td>
</tr>
<tr>
<td>d. &quot;More than 6 seem to get in each other's way and do not work as efficiently:&quot;</td>
<td>0</td>
</tr>
<tr>
<td>2. Resembles family size:</td>
<td></td>
</tr>
<tr>
<td>a. &quot;Four makes homelike situation:&quot;</td>
<td>2</td>
</tr>
<tr>
<td>b. &quot;Four to six resembles family size group:&quot;</td>
<td>5</td>
</tr>
<tr>
<td>3. Pertaining to time:</td>
<td></td>
</tr>
<tr>
<td>a. &quot;Four is sufficient number for getting all responsibilities done in the short time allotted:&quot;</td>
<td>1</td>
</tr>
<tr>
<td>b. &quot;Length of class period too short for two girls to prepare and serve entire meal:&quot;</td>
<td>2</td>
</tr>
</tbody>
</table>

#TT-Teacher trainers; SS-State supervisors; CS-City supervisors.

Original tables showing complete data on file in Home Economics Education Office, Oregon State College.

A study of Table 25 shows that of the 131 teacher trainers, state supervisors, and city supervisors stating some definite opinion, 52.1 per cent of them considered that groups of 4 pupils work most effectively when preparing meals in foods classes. Others may be regarded as favoring groups of four since 18.2 per cent stated that unit groups of four or five were most efficient. As compared to this total of
70.3 per cent favoring groups of 4 with a possibility of one extra in each group it may be noted on Table 25 that 13.2 per cent favored smaller groups having only two to four pupils in each. Of these, sixteen persons suggested the smaller groups. Six persons recommended two pupils to each meal preparation group, and six others advised three persons to each unit group.  

The reasons given for the various opinions may be catalogued under three groupings, namely: (1) most effective learning group; (2) resemblance to family groups; and (3) the time element.

Of the 121 persons reporting, 56.2 per cent of them considered the problem from the standpoint of what constituted the most effective learning group. In this respect, 62.4 per cent of these 68 persons believed that groups of four were most conducive to effective learning; .08 per cent regarded groups of two to be most efficient.

Concerning the advisability of four pupils to a group, ten educators stated that with four, each girl gets more individual experience. It was pointed out by 5 teacher trainers, 4 state supervisors, and one city supervisor that too large groups make experience limited for each pupil. "Four gives larger problems to each girl than when there is a larger group," commented a teacher trainer and a city supervisor. Nine educators stated that four pupils would probably comprise the most effective working group from the standpoint of use of equipment and space and naturalness of situation. Seven other educators stated that with groups of four there is more

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1/ Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
opportunity for co-operation—more than 4 seem to get in each other's way and do not work as effectively. A state supervisor and a city supervisor asserted that with four, the duties can be better distributed. One state supervisor commented, "I recommend 4—however, I prefer seeing one girl of the group carry major responsibilities per meal. Four are given various responsibilities, while two take major responsibilities."

Three teacher trainers, one state supervisor, and two city supervisors believed that groups of two comprised the most effective learning groups. Four of these leaders of education declared that two provide more opportunity for management problems to be executed.

Two teacher trainers recommended that groups of three pupils will provide the most effective learning unit. A comment suggests the reasoning back of their decision: "Three is best, this allows for more individual development and supervision."

One city supervisor recommended 6 to 8 in each group, but felt that the group should be smaller for advanced girls. To contrast this, one state supervisor and one city supervisor stated: "More than 6 seem to get in each other's way and do not work as efficiently." Another city supervisor stated: "With 8 in a group, for short periods, the work is divided to greater advantage."

There were twenty educators who contended that the resemblance to the typical family was an important consideration. Nine educators contended that four to six resembles the family size most generally, while three teacher trainers and one state supervisor asserted that four makes homelike situations and each kitchen can then be home size.
This point is further emphasized by another teacher trainer and state supervisor when they state: "Meal for two is too small." Other comments cite varying factors to be considered:

State supervisors may be quoted as saying: "Average size family in New Mexico is 4.5."

"Advanced pupils work in 2's as many families at first are small."

"Should be the size of the average family in the community."

A city supervisor pointed out: "Four provides for host, hostess, daughter and guest."

The time element was a third factor taken into consideration in determining the size of the unit groups for meal preparation. Twenty-one homemaking educators considered this factor when making their decisions. Nine educators, seven of whom were city supervisors, stated that four is sufficient number for getting all responsibilities done in the short time allotted. Five teacher trainers and city supervisors cited that the length of the class period is too short for two girls to prepare and serve an entire meal. Other teacher trainers and city supervisors pointed out that 4 to 6 pupils to a group saves time in class. Teacher trainers stated: "Six is advantageous if class time is short," and "If time is flexible as in a home situation, smaller groups may be effective."

Some of the comments contributed by the commentators of this study were more general in nature. Six persons, four of whom were state supervisors, stated that the number should be such that all would be kept busy. "Some plan should be made to have the girls rotate setting table, making biscuits, etc.,” remarked one teacher.
trainer. One city supervisor stated that she "preferred individual work."

The teacher trainers and the city supervisors believed that the size of the groups for meal preparation depends on several factors. Five teacher trainers and city supervisors believed that the size of the group depends on the flexibility of time and the length of periods. Others, three persons, stated that this question would depend on the class—the maturity and experience of the girls. Three other educators believed that the complexity of the meal would determine the size of the working units and the type of service would need to be considered. The number in the class, the number of units, and the equipment would determine the size of the groups asserted four teacher trainers.¹

To summarize the decisions of 121 homemaking educators concerning the most effective size of the groups for meal preparation, it is evident that groups of four for one reason or another have proved to be the most effective size. Six persons believed that two pupils in a group are most desirable, and a few persons recommended groups of three, six, or eight for various personal or individual reasons. The reasons given for preferring certain numbers in the groups were: consideration of the learning situation; resemblance to family situations; and the time element. Of these factors the effectiveness of the learning situation was the most prominent consideration. In this respect groups of four were favored, mainly because in such a

¹/Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
group the individual pupils get more experience and because such a group can use the equipment and space more effectively.

In considering the resemblance to the typical family, groups of four were again to be preferred since these educators believed that the average family is about this size. However, a few definitely advised groups of two because they believed this to be the typical family of today. In this respect it was pointed out that the groups should resemble the sizes of the families in the community, be that what it may.

When considering the time element the annotators again favored groups of four as being a sufficient number for getting all the responsibilities done in the short time allotted. They definitely felt that groups of two constituted a problem when the periods are short and time is not flexible. A few suggested that from the standpoint of time, six to eight pupils can divide the work to greater time efficiency, but the lessened experience for the pupils seemed to offset this in their opinion.

In general, these commentators believed that the number should be such that all will be kept busy, and that rotation of work was desirable. The decision as to the size of working units of pupils for meal preparation depended on several factors, contended these educators. The flexibility of time was the most influential factor, it seemed, but other determining factors were: the maturity and experience of the pupils, the number of units, the number in the class, and the equipment.
Any study of practices in teaching foods provokes the question of whether individual members of the classes should be provided with equipment for preparing and serving meals. The investigators of this study considered it significant to determine whether this group of homemaking educators would consider it advantageous to have sufficient equipment for each member of the class to be preparing and serving meals simultaneously. Accordingly, one section of the questionnaire investigated this matter by asking the following questions:

Do you recommend that each member of the class should be provided with equipment sufficient for cooking, serving, and eating a simple meal so that each pupil could use this equipment at the same time? Yes....... No....... 

If less than this amount of equipment is needed, please explain: 

If more than this amount is needed, please explain: 

The positive and the negative responses were recorded and tabulated. Some persons qualified their answer by volunteered explanations. These were classified and tabulated for further clarity.1/ 

Of the 119 teacher trainers, state supervisors, and city supervisors who expressed their opinions relative to the question of whether each member of the class should be provided with equipment

1/ Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
sufficient for cooking, serving and eating a simple meal, 82 persons (68.9 per cent) answered "no" to the question. Thirty-four persons (28.6 per cent) believed that this would be desirable, and three persons were too undecided in their own minds to give a definite answer either affirmatively or negatively.

To consider specifically the 28.6 per cent who believed that there should be sufficient equipment for each member of the class to be cooking, serving, or eating at the same time, it may be observed that they referred especially to the service dishes and silver when they made their decision, as is evident by seven educators who said that each pupil would need her own service dishes and silver. A city supervisor commented, "I believe we learn best by actually doing, experiencing, rather than by observing. Enough equipment means more experiences during the periods which in most schools are very short."

In analyzing the reasons why a majority of these educators would not have sufficient equipment for each member of the class to be doing the same thing at the same time it may be seen the teacher trainers and the state supervisors did not consider this necessary for good teaching. Five educators pointed out that this arrangement is too expensive for value received and, in their opinion, it necessitates wasted space and money. Three teacher trainers and state supervisors consider the average length of periods too short to permit working alone.

Those educators who believed that less than the suggested amount of equipment was needed explained their contention as due to one or
more of three main concerns: (1) Group organization would not necessitate this amount of equipment, (2) the family should be the basis rather than the individual, and (3) a better learning situation is created if the pupils work in groups.

A majority of the homemaking educators, 53.7 per cent, considered that sufficient equipment for each member of the class to be preparing and serving meals simultaneously was unnecessary if group organization was used. Thirteen educators believed that the cooking equipment should be for groups, and 14 persons stated that each member would not need all the equipment for cooking a meal if the class works in groups. Twelve persons recommended enough for four for a meal with these four working together, rotating the equipment, some planning, and others working on other problems. Six commentators would provide enough equipment for 2 girls to do a meal. Two teacher trainers stated that two pupils work well together, and another teacher trainer pointed out that two should work together for practice lessons, in her opinion. One teacher trainer stated: "I would have one unit kitchen for every nine pupils."

Thirty-three educators, 41.5 per cent, based their opposition to equipping for the individual girls on the thesis that the family should be the basis of the class work rather than the individual pupil. Eighteen persons stated that, in their opinion, there should be enough equipment in each unit kitchen for a family group. Two teacher trainers specified that the equipment should be that of a family kitchen. A city supervisor pointed out that this equipment, she believed, should be of family-size utensils. One teacher trainer
explained: "The philosophy of homemaking for secondary schools indicates family meals; even if only one girl cooked, I would have family-size utensils in the unit." One city supervisor emphasized the meal basis for the class work, and 12 other educators recommended equipping for three to four as a family unit.

Twenty educators, 24.4 per cent, asserted that a better learning situation is gained if the pupils work in groups. Five teacher trainers and city supervisors pointed out that pupils need to learn how to co-operate as well as to cook, and one teacher trainer stated: "Preparation of a meal requires division of labor."

Two persons stated that too much equipment does not make for experience in management which is so essential. Two city supervisors believed that girls should have various responsibilities in their groups, and one teacher trainer commented: "Children should be taught economy in use of equipment, always keeping in mind what the family will use at home." One city supervisor may be quoted as saying, "If equipment is limited, the pupils have more opportunity to improvise." Other comments contributed were:

A state supervisor stated: "If individually prepared, cost and economy of food is lost."

City supervisors stated: "Girls work with family members preparing meals—why not in groups at school?"

"They need the social training of group work."

"Better transition from group work to home."

In response to the request for an explanation when commentators recommended more than sufficient equipment for each individual pupil to prepare and serve food at the same time, six persons advised that
additional equipment is needed for entertaining. As one teacher trainer stated: "At times it is desirable to have teacher and guests served with the pupils." Five persons approved of additional equipment for quantity cookery in case of banquets or for work by large groups. One teacher trainer and one state supervisor would have extra knives and bowls because of such a need when several are working at the same time. One state supervisor would have extra canning equipment.

To summarize the findings from this group of 119 homemaking educators relative to whether each member of the class should be provided with equipment sufficient for cooking, serving and eating a simple meal so that each pupil could use this equipment at the same time, 68.9 per cent of them would not favor so much equipment, as compared to 28.6 per cent who would favor this amount of equipment. The main reasons given by those persons who disapproved of equipping each individual pupil was because, in their opinion, this is not necessary for good teaching; it is too expensive for value received and represents wasted space and money; the average length of period does not permit pupils working alone; and no variety is afforded in class.

The main reasons cited by those who recommended sufficient equipment for each member of the class were that pupils each need their own service dishes and silver; that pupils learn best by actually doing and experiencing rather than by observing; and sufficient equipment saves time.

In instances where the commentators recommended less than
sufficient equipment for each pupil they based their decision on the following beliefs: group organization does not necessitate this; the family should be the basis of the class work rather than the individual; and a better learning situation is provided when the pupils work in groups. These commentators asserted that group organization is desirable since the pupils need experience in co-operation, division of labor, leadership in taking responsibilities, management, economy in use of equipment, and social training. They believe that there is better transition from group work to the home, since girls work with family members in preparing meals at home. Since the philosophy of homemaking education indicates family meals, the equipment and the kitchen should exemplify the family and home situation, they declared. Recognizing the advantages of group work, these educators stated that to equip for the individual girl is unnecessary since, by rotation of equipment, the groups can function effectively on less equipment.

PREPARATION OF A SINGLE FOOD

In order to complete this investigation of Practices in Teaching Foods there crept in a final point for question: Would it be desirable to equip for the preparation of a single food, such as cocoa or creamed potatoes? To realize this specific bit of information the investigators added the concluding question in this section of the inquiry:

In addition to the equipment needed for meal service, is equipment needed for preparing a single food? (Space was allowed for comments.)

If so, indicate sizes desired in terms of servings prepared:
The responses to the initial direct question were tallied, negative and affirmative. The comments in explanation to both responses were sorted and classified into groups. The sizes suggested by the commentators relative to size of equipment were analyzed and the opinions tabulated.\footnote{Original tables showing complete data on file in Home Economics Education Office, Oregon State College.}

Of the 111 teacher trainers, state supervisors, and city supervisors who indicated their opinions on the questionnaire, 65 would not have equipment for preparing a single food in addition to the equipment needed for meal service, while 39 persons would have the additional equipment for single foods. Seven persons were too undecided to express a positive opinion.

In analyzing the comments of the minority desiring equipment for the single food, it is evident that 13 persons believed that provision should be made for individual preparation by each student for practice, acquiring skills, learning basic fundamentals, for individual problems, and for cooking large quantities. Nine persons stated that some provision must be made for practice. Six teacher trainers and city supervisors believed that in order to prepare meals it is necessary to learn some basic fundamentals by preparing individual foods. Four educators pointed out that most of their work was individual and the girls work on their individual problems. One city supervisor asserted: "Individual preparation is the only way that a pupil really learns." Two persons would have equipment for preparing single foods in large quantities.
Five teacher trainers and state supervisors pointed to the fact that single foods make up meals, and two teacher trainers suggested that single foods could be made in quantities for the family. A city supervisor commented: "For comparison of methods, materials, etc., it is often desirable to have different members of the group make the same thing in different ways or adapt some recipe to different uses."

To analyze specifically the thinking of the 65 homemaking educators who would not provide equipment for preparing a single food in addition to the equipment needed for meal service, it may be noted that 36 persons stated that standard equipment for meal service should be provided. One teacher trainer asserted that more than this amount would be unnecessary expense, and one state supervisor pointed out that only standard equipment is necessary except for demonstration.

Thirty-five persons believed that the same equipment could be used for either the preparation of single foods or the meal basis type of lesson. Eight teacher trainers stated that if practice lessons are desired, the pupils may work in groups of two and use the same equipment, and one city supervisor believed that "pupils need to learn to use pans for different purposes." One teacher trainer commented: "For occasional preparation of small amounts for tray for sick, for example, use the smallest equipment in family units."

A state supervisor commented: "Single foods may be taught through incorporating them in meals. Responsibility may be rotated in preparation of several complete meals supplemented by home projects."

Six persons believed that emphasis on the home situation is
desirable. They stated that too much equipment is not a true to life situation, usually. Two teacher trainers stated that there should be enough equipment for the average sized family of five or six. One city supervisor stated: "In the home we expect a utensil to serve as many purposes as possible." One state supervisor commented: "I believe in having foods work on the family basis prepared in amounts comparable to the home situation."

Six teacher trainers and state supervisors believe that there is too much emphasis on single foods. One teacher trainer commented: "I would hope that less and less emphasis be placed on preparing single foods." Another teacher trainer commented: "Food should be prepared only for serving to selves as a meal or to some group being entertained." Another teacher trainer said: "Any food prepared should be served and eaten as in family situation, even if in small quantities." "It is best to prepare one quantity and each girl in the family have a share in the preparation," asserted a teacher trainer.

In response to the inquiry regarding the size of this equipment recommended for the preparation of the single foods it may be noted that nine persons advised family-size. One teacher trainer commented: "Same size as is in the unit kitchen." Eight educators recommended a size equivalent to four or six servings. Six persons preferred a size for 3 or 4 servings. Four persons believed that a small size adequate to serving two persons was desirable. Two teacher trainers and two state supervisors would recommend one-half to whole recipe quantities, while one state supervisor and one city supervisor
recommend single servings.

Several of the city supervisors contributed their individual comments: "There are so few times when all the class would be preparing the same food that it would seem foolish to equip specifically for preparation of single dishes by all. Couldn't regular equipment be adapted?" "If preparation of a single food is indicated in the solution of the pupil's problems, the same equipment may be used."

To summarize the findings sifted from the responses to the question of whether it would be desirable to equip for the preparation of a single food, it seems apparent that a majority, 65 persons of the 111 contributing, would not equip for individual foods. Thirty-nine persons would approve of equipment for the single foods. The reasons given most frequently for advising additional equipment for single foods were: (1) for practice in developing skills, learning basic fundamentals, for working on individual problems, and for cooking in large quantities, and (2) single foods make up meals so any preparation of such should be made in quantities for the family.

The main reasons given for disapproving of the additional equipment for single foods were: (1) standard equipment for meal service should be provided, (2) the same equipment may be used for either meal preparation or single food preparation, (3) emphasis should be put on the home situation, and (4) too much emphasis on single foods is undesirable.

When asked what size these educators would recommend for this proposed equipment for single foods, they responded by favoring, first,
the family size, second, sizes adequate for 4 to 6 servings, third, three or four serving size, fourth, a small size adequate for only two people, and a few individuals would recommend single servings.

Summary of Opinions Concerning Practices in Teaching Foods

It is considered by homemaking educators to be advantageous to have a maximum limit for foods classes. Many factors out of the hands of the homemaking teacher or supervisor, are very forceful in deciding the number per class, and these factors must be recognized and adjusted to. The teacher is an important figure in connection with varying sizes of classes, in that, the method which she uses may, or may not be, the most effective procedure to use, the problem method being more adaptable and effective than the unit method when classes are large. The school and the community must be taken into consideration in determining the maximum number for a class.

In general, these educators indicate that a class of 24 can carry on the most effective learning experiences, but as many as 32 pupils in one class can work efficiently. In any instance, a thorough study of many factors of the homemaking department, the school, the community, and the teacher herself, must be made before a valid decision may be reached concerning the size of foods classes.

The data sifted from the decisions of 121 homemaking educators concerning the most effective size of the groups for meal preparation indicate that groups of four have proved to be the most effective. A comparatively small percentage, 10 per cent, have found groups of
two to be most desirable, and a few persons recommended groups of three, six, or eight for various personal or individual reasons. The reasons given for preferring certain numbers in the groups were: consideration of the learning situation; resemblance to the family situations; and the time element. Of these factors the effectiveness of the learning situation was the most evident consideration. In this respect groups of four were favored mainly because, in such a group, the individual pupils get more experience and because such a group can use the equipment and space more effectively.

In considering the resemblance to the typical family, groups of four were again to be preferred since a majority of these educators believed that the average family is about this size. However, a few definitely advised groups of two because they believed this to be the typical family of today. In this respect it was pointed out that the groups should resemble the size of the families in the community, be that what it may.

When considering the time element, the annotators again favored groups of four as being sufficient number for getting all the responsibilities done in the short time allotted. They believed that groups of two constituted a problem when the periods are short and time is not flexible. A few suggested that from the standpoint of time, six to eight pupils can divide the work to greater time efficiency but the lessened experience for the pupils seemed to offset this in their opinions.

In general, these commentators believed that the number should be such that all pupils will be kept busy, and that rotation of work was
desirable. The decision as to the size of working units of pupils for meal preparation depended on several factors, contended these educators. The flexibility of time was the most influential factor, it seemed, but other determining factors were: the maturity and experience of the pupils, the number of units, the number in the class, and the equipment.

To summarize the judgments of this group of 119 homemaking educators relative to whether each member of the class should be provided with equipment sufficient for cooking, serving and eating a simple meal so that each pupil could use this equipment at the same time, it is seen that 68.9 per cent of them would not favor so much equipment, as compared to 28.6 per cent of them who would favor this amount of equipment. The main reasons given by these persons who disapproved of equipping each individual pupil was because, in their opinion, this is not necessary for good teaching; it is too expensive for value received and represents wasted space and money; the average length of period does not permit pupils to work alone; and no variety is afforded in class.

The main reasons cited by those who recommended sufficient equipment for each member of the class were: that pupils each need their own service dishes and silver; that pupils learn best by actually doing and experiencing rather than by observing; and sufficient equipment saves time.

In instances where the commentators recommended less than sufficient equipment for each pupil, they based their decision on the following beliefs: group organization does not necessitate this; the
family should be the basis of the class work rather than the individual; and, a better learning situation is provided when the pupils work in groups. These commentators asserted that group organization is desirable since the pupils need experience in cooperation, division of labor, leadership in taking responsibilities, management, economy in use of equipment, and social training. They believe that there is better transition from group work to the home since girls work with family members in preparing meals at home. Since the philosophy of homemaking education indicates family meals, the equipment and the kitchen should exemplify the family and the home situation, they declared. Recognizing the advantages of group work, these educators stated that to equip for the individual girl is unnecessary since, by rotation of equipment, the groups can function effectively on less equipment.

Would it be desirable to equip for the preparation of a single food? These homemaking educators vote down such a proposal. Of 111 persons expressing their opinions relative to the inquiry, 65 persons said that equipment for single foods is unnecessary, while 39 persons would approve of having such equipment. The reasons given most frequently for advising such additional equipment for single foods were: for practice in developing skills, for learning basic fundamentals, for working on individual problems, and for cooking in large quantities. Furthermore, they believe that single foods make up meals, so any preparation of such should be made in quantities for the family.

The main reasons given for disapproving of the additional equipment for single foods were: standard equipment for meal service
should be provided; the same equipment may be used for either meal
preparation or single food preparation; emphasis should be put on
the home situation; and too much emphasis on single foods is
undesirable.

When asked what size this equipment for single foods should be,
these educators responded by favoring: first, the family size;
second, sizes adequate for 4 to 6 servings; third, three or four
serving size; fourth, a small size which would be adequate for only
two people; and a few individuals would recommend single serving
size.
CHAPTER VIII

MATERIALS RECOMMENDED FOR SMALL EQUIPMENT
AND WORK TABLE SURFACE

One of the ever present problems which confronts the homemaking teacher is the matter of what materials are most satisfactory for the various articles of equipment and for the work table surfaces. The investigator considered it significant to ascertain some basis for determining this in order to complete the information necessary for the conclusions to be drawn from this study. Accordingly, the last section of this investigation treated this problem. The inquiry relative to small equipment was done by listing some frequently used equipment followed with space for the commentators to indicate the material which they considered most satisfactory for the particular utensil. A list of the materials which are available in kitchen utensils was suggested. The equipment list was as follows: baking pans, casserole, double boiler, measuring cups, mixing bowl, sauce pan.

The portion relative to the work table surfaces was presented by listing the following materials usable for work table surfaces: enameled metal, linoleum, metal alloys, porcelain enamel, wood (specify kind). Space was allowed for other types to be listed. The questionnaire allowed ample space for the commentators to indicate their approval or disapproval of each material and give their reasons for their choice.

Findings relative to the materials recommended for small equipment and for table tops will be recorded and discussed individually
throughout the remainder of this chapter.

**Materials Recommended for Small Equipment**

A survey of the number of times that these different homemaking educators recommended specific materials for the various articles of equipment has been tabulated and is recorded in Table 26.
### TABLE 26

Materials recommended for Small Equipment

<table>
<thead>
<tr>
<th>Equipment and Materials Recommended##</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT#</td>
</tr>
<tr>
<td>Baking pans:</td>
<td></td>
</tr>
<tr>
<td>Aluminum (pressed):</td>
<td>38</td>
</tr>
<tr>
<td>Tin:</td>
<td>18</td>
</tr>
<tr>
<td>Heat proof glass:</td>
<td>11</td>
</tr>
<tr>
<td>Enameled ware:</td>
<td>3</td>
</tr>
<tr>
<td>Sheet iron:</td>
<td>2</td>
</tr>
<tr>
<td>Casserole:</td>
<td></td>
</tr>
<tr>
<td>Pyrex or heat proof glass:</td>
<td>50</td>
</tr>
<tr>
<td>Earthenware (pottery):</td>
<td>19</td>
</tr>
<tr>
<td>Double boiler:</td>
<td></td>
</tr>
<tr>
<td>Aluminum (pressed):</td>
<td>37</td>
</tr>
<tr>
<td>Enameled ware:</td>
<td>23</td>
</tr>
<tr>
<td>Heat proof glass:</td>
<td>6</td>
</tr>
<tr>
<td>Stainless steel:</td>
<td>2</td>
</tr>
<tr>
<td>Measuring cup:</td>
<td></td>
</tr>
<tr>
<td>Heat proof glass:</td>
<td>43</td>
</tr>
<tr>
<td>Aluminum:</td>
<td>30</td>
</tr>
<tr>
<td>Plastics:</td>
<td>5</td>
</tr>
<tr>
<td>Tin:</td>
<td>3</td>
</tr>
<tr>
<td>Mixing bowl:</td>
<td></td>
</tr>
<tr>
<td>Earthenware (pottery):</td>
<td>44</td>
</tr>
<tr>
<td>Heat proof glass:</td>
<td>10</td>
</tr>
<tr>
<td>Enameled ware:</td>
<td>5</td>
</tr>
<tr>
<td>Sauce pans:</td>
<td></td>
</tr>
<tr>
<td>Aluminum (pressed):</td>
<td>37</td>
</tr>
<tr>
<td>Enameled ware:</td>
<td>19</td>
</tr>
<tr>
<td>Stainless steel:</td>
<td>9</td>
</tr>
<tr>
<td>Aluminum (cast):</td>
<td>4</td>
</tr>
<tr>
<td>Heat proof glass:</td>
<td>2</td>
</tr>
</tbody>
</table>

##TT-Teacher trainers; SS-State supervisors; CS-City supervisors.

### Materials recommended by five or fewer persons was omitted from the table.

Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
Since some persons indicated their approval of more than one material for the various utensils, it is impossible to determine the exact number of persons who contributed to this information. A study of Table 26 reveals some interesting facts, however. The large majority of 83 persons favoring pressed aluminum would seem to give this metal precedence over others for baking pans. Tin was favored by 43 persons, and heat proof glass was recommended by 24 persons. In comparison to the metals just cited, few persons advised other materials. Table 26 shows that eight educators approve of enameled ware, seven persons advise sheet iron, and four persons recommend pottery. Other than these materials just one or two persons mentioned any other materials.1/

Table 26 shows that pyrex is definitely favored for casseroles with 107 persons recommending it. Pottery was next in favor with 50 persons approving. Three persons mentioned pressed aluminum, but any other materials were not recommended by more than one individual if at all.

Pressed aluminum was the most favored material for double boilers with 84 persons preferring it. Enameled ware was next in preference with 52 persons recommending this. Eighteen educators approve of heat proof glass for double boilers, while only six persons mentioned stainless steel. Two individuals prefer cast aluminum for double boilers.

Table 26 shows that heat proof glass and aluminum are preferred

1/Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
for measuring cups with 89 educators approving of the heat proof glass to 72 persons preferring aluminum. Fifteen homemaking educators approve of plastics and the same number recommend tin. Stainless steel and others were mentioned by a single individual.

As to mixing bowls, Table 26 indicates that a large majority, 100 persons, recommend pottery for the mixing bowls. Twenty-five favor heat proof glass, and fifteen approve of enameled ware for the bowls. Pressed aluminum, stainless steel, and a variety of materials were each mentioned by a single individual.

For sauce pans a majority, 88 in number, recommend pressed aluminum. Thirty-nine persons favor enameled ware sauce pans, and 20 persons approve of stainless steel sauce pans. Seven persons advised cast aluminum, while only six persons mentioned heat proof glass for sauce pans. One or two individuals mentioned copper, iron, tin, pottery, and a variety of materials.

Some of the comments which the commentators volunteered seem enlightening when determining the most satisfactory materials to use small equipment:

Teacher trainers made the following comments:
"Each laboratory should include as many kinds of materials as possible, ranging from 10-cent store utensils up to heavy aluminum, stainless steel and copper and glass. Students should be familiar with many types and know relative costs."

"My decision would depend on the quality. I believe it is ideal for pupils to use a variety of materials and variety of qualities to recognize values in wearability, cost, use, and care. No one is preferable."
"Casseroles of pottery are very utilitarian. They may be used for flowers and serving dishes for foods other than those which are baked."

State supervisors had the following to say:
"I cannot answer this section as circumstances in home conditions differ so in various localities. In our state (Delaware) it is not advisable to have colored children have everything with which to cook. In most cases it is advisable to have the white children have everything necessary. The colored homes are very meager. Some of our white homes are, too. We base all our teaching on home problems."

"We like to equip one unit in pyrex, one in wear-ever aluminum, and another in best grade porcelain. Prices vary little due to school discounts. A good problem for consumer education, too.

To summarize the opinions of these homemaking educators regarding the most satisfactory materials to use for small equipment, it may be said that certain materials for specific utensils may be definitely preferable. For baking pans pressed aluminum is definitely favored by a majority of educators, but tin and heat proof glass have a substantial number of persons favoring them. Pyrex is most heartily recommended for casseroles by 107 persons. Earthenware is favored by 50 persons. Other materials were scarcely mentioned as being preferable.

For double boilers, a majority, 84 in number, prefer pressed aluminum, however, a notable number, 52 persons, approve of enameled ware. Heat proof glass is favored by 18 educators. Stainless steel was mentioned by six persons.

Heat proof glass was preferred for measuring cups by a majority of 89 persons. Closely following in preference, however, was aluminum, with 72 persons recommending it. Plastics and tin were
favored each by 15 persons. Other materials were not mentioned by more than one person.

Pottery mixing bowls were favored by 100 of these educators. Twenty-five educators approved of heat proof glass mixing bowls, and 15 persons recommended enameled ware. Plastics were mentioned by 5 individuals, and stainless steel was mentioned twice.

Aluminum sauce pans were preferred by 88 persons; enameled ware was favored by 39 individuals, and 20 persons recommended stainless steel sauce pans. Cast aluminum, heat proof glass, copper, iron, tin, and pottery were merely mentioned by one or several individuals.

**Materials Recommended for Work Table Surface**

A study of the comments relative to Work Table Surfaces showed a wide range of opinions. Each material was analyzed individually and the number of persons who checked either "yes" or "no" was tallied. The reasons given for each was then listed and tabulated. The results of this analysis are recorded in Table 27.
### TABLE 27

Opinions Relative to Materials Recommended for Work Table Surface

<table>
<thead>
<tr>
<th>Materials Recommended</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT(^{1})</td>
</tr>
<tr>
<td><strong>Enameled metal:</strong></td>
<td></td>
</tr>
<tr>
<td>No:</td>
<td>25</td>
</tr>
<tr>
<td>Yes:</td>
<td>3</td>
</tr>
<tr>
<td><strong>Linoleum:</strong></td>
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<td>Yes:</td>
<td>43</td>
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<td>No:</td>
<td>1</td>
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<tr>
<td><strong>Metal alloys:</strong></td>
<td></td>
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<td>Yes:</td>
<td>18</td>
</tr>
<tr>
<td>No:</td>
<td>12</td>
</tr>
<tr>
<td><strong>Porcelain enamel:</strong></td>
<td></td>
</tr>
<tr>
<td>No:</td>
<td>18</td>
</tr>
<tr>
<td>Yes:</td>
<td>11</td>
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<tr>
<td><strong>Wood:</strong></td>
<td></td>
</tr>
<tr>
<td>Yes:</td>
<td>32</td>
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<tr>
<td>Hardwood: (unspecified)</td>
<td>8</td>
</tr>
<tr>
<td>Maple:</td>
<td>6</td>
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<td>Oak:</td>
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</tr>
<tr>
<td>No:</td>
<td>11</td>
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<td><strong>Other types:</strong></td>
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<td><strong>Composition:</strong></td>
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<td>Yes:</td>
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<td>No:</td>
<td>0</td>
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<td><strong>Tile:</strong></td>
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<td>Yes:</td>
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</tr>
<tr>
<td>No:</td>
<td>0</td>
</tr>
<tr>
<td><strong>Cork:</strong></td>
<td></td>
</tr>
<tr>
<td>Yes:</td>
<td>4</td>
</tr>
</tbody>
</table>

\(^{1}\)Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
A thorough study of Table 27 reveals that 10 per cent, 13 persons, of the 130 persons returning questionnaires, would approve of enameled metal for work table surfaces. Forty-one persons definitely stated that they did not approve of this surface. Of the 131 cooperators in the study 71.7 per cent stated that they approved of linoleum for work table surfaces, while three persons asserted that they did not favor linoleum. Metal alloys were favored by 38.2 per cent of those persons who returned the questionnaires, while 18 persons would not favor this material for work table surfaces. Twenty-eight persons approved of porcelain enamel and thirty-three persons disapproved of the porcelain table top. Fifty-six persons stated that they approved of wood table tops, while 18 persons would not recommend wood for the work table surface. Other types of work table surfaces mentioned were: bakelite composition recommended by six persons, a synthetic composition mentioned by one person and plastics recommended by two persons. One person recommended rubber, two persons advised masonite, seven educators favored tile, and four persons approved of cork. One state supervisor recommended asbestos board.

The main objections to enameled metal were that it chips off and it is noisy. Twenty-seven persons stated that enameled metal chips off, eleven persons asserted that it is too noisy, four have found that it stains easily, two persons pointed out that acids affect the enameled metal, and individual commentators pointed out that it cracks, is not resilient, it etches, scratches, is slippery, may break, it is expensive to keep up, and it is not desirable when the homemaking rooms are used for school parties.
The reasons given by the 13 persons who approved of the enameled metal indicate that it is durable and easily cleaned as pointed out by four persons. Three educators considered it favorably because they considered it fairly inexpensive.

The large number of persons that indicated their approval of linoleum for table tops state the main reasons as being: it is easily cared for, stated 37 persons, it is real inexpensive, asserted 27 persons, twenty-two persons like it because it is noiseless, 21 persons have found it to be durable, and 18 persons consider it attractive. Six persons approve of linoleum because it is resilient, while four persons said it is sanitary, cuts down breakage, and is available in homes. Three persons like it because it is colorful and does not stain. Two educators favor linoleum because it can be replaced. Individual teacher trainers stated that it does not chip and it can be painted. A city supervisor favors linoleum because it is heat resistant. Six homemaking educators commented that they would approve of linoleum if it was well laid.

The reasons given by the three persons who disapproved of linoleum were that it stains, they consider it less durable in school rooms, it burns, and one city supervisor would object to it since the homemaking rooms are used for school parties.

Of those persons who approved of metal alloys for work table surfaces, 18 consider it durable, 14 educators consider it easy to care for, and 10 education leaders like the appearance of it. Five persons state that it is sanitary, and two recognize that it resists heat.
Of the 18 persons who disapproved of the metal alloy work table surface, 12 consider it expensive, and 11 educators have found that it stains easily. Four persons assert that it is difficult to clean, and two persons objected because it is noisy, not attractive to them, and shows finger marks. Single individuals stated that it glares, rubs off black, cracks, and scratches.

Table 27 shows that 33 persons disapproved of porcelain enamel. Fifteen of these oppositionists consider it too noisy, thirteen educators stated that it chips easily, and seven leaders consider it expensive. Five persons have found that it stains easily, four criticize it because dishes break easily on it, two persons point out that it is susceptible to heat changes and is affected by acids. Single individuals stated that it is cold, the finish is not durable, it is slippery, hard, and brittle.

Of the 28 homemaking educators who approved of the porcelain enamel, 15 favored it because it is easy to clean; nine persons like it because it is durable, while eight consider it most attractive. Three city supervisors consider it sanitary. Two educators approve because the porcelain enamel does not discolor, and one person pointed out that it doesn't chip and it is inexpensive, in her opinion.

Fifty-six persons stated that they approved of wood for the surface of the work tables. Eighteen persons did not specify the kind of wood but believed that it should be some hardwood. Twelve educators recommended maple, and six commentators favored oak. Three persons recommended birch, and two teacher trainers advised work table surfaces of hard pine. Single individuals recommended heart
pine, white pine, plywood, ash, and white maple. The nineteen persons who stated that they disapproved of wood work table surfaces gave no reason for their decisions.

The reason that these educators recommended hardwood was because they consider it easy to care for, they have found that it gives good service, if finished properly, it resists heat, and one person pointed out that it is not noisy, and it is easy to refinish.

Of the 12 educators who recommend maple for work table surfaces, 4 persons consider it easy to clean and durable, three persons like it because it is noiseless, two persons stated that maple wood table surfaces cut down breakage, refinishes easily, and is attractive.

Oak was approved by six teacher trainers and state supervisors. The reasons which they gave were: three teacher trainers consider that it cleans easily and is durable. Two persons found that it refinishes easily and is noiseless.

The three persons who recommended birch stated that it is noiseless, it is attractive, and it is easily cleaned. The two persons who mentioned hard pine based their preference on the inexpensiveness of the wood, but one teacher trainer specified that it should be stain filled. The teacher trainer who recommended pine considered it noiseless, attractive, and easily cleaned. Heart pine was recommended by two teacher trainers on the assertion that it gives good service.

Eight persons recommended work table surfaces of wood but did not specify any kind of wood. These persons based their opinion on the statements that it is resistant to heat and acids, it is neat and
clean, it is less expensive, and it is durable. One teacher trainer stated that wood work table surfaces should be Val Sparred.

Twelve persons stated that they did not approve of wood work table surfaces because in their opinion it is difficult to care for, it stains, it splinters, it shows wear too soon, and in their opinion it is not attractive. One city supervisor criticized it because in her experience it cracks, warps, and mars.

Six persons recommended bakelite work table surfaces. They asserted that hot utensils can be put on it, it doesn't stain easily, and it is easily cleaned. One city supervisor stated her disapproval of bakelite table tops because, in her opinion, it stains easily, and is difficult to clean. One person, a state supervisor, recommends a synthetic product on the assertion that it is attractive, it is fairly durable, and it can be refinished. Two persons stated their disapproval of plastics because, in their opinion, it never looks clean, it softens around the sink, it chips, and it is very expensive to keep up.

One teacher trainer recommended rubber. Two educators recommended masonite, stating that it is not noisy, it is inexpensive, and it is durable. One city supervisor considered it easy to clean and stated that it does not cut easily.

Seven persons recommended tile because it is very durable, colorful, easily cared for, and attractive. Three city supervisors disapproved of tile because it is noisy, chips, and is hard on dishes. Four teacher trainers recommended cork because they had found it to be inexpensive, easily cared for, and there is no breakage due to it.
One state supervisor recommended asbestos board with no comment regarding the qualities of the material.¹

Some of the comments which the commentators volunteered relative to the merits of different materials for work table surfaces further explain the basis for their opinions.

Teacher trainers commented:
"I would accept recommendations made by research tries on equipment, etc.—I do not trust my own preference."

"I would not recommend one type. I would use as many types as possible to teach the selection and care of several types."

"Cork is best for clothing since it does not allow material to slide out but must be kept free from soil as possible."

"Wood must be kept in condition by finish which makes them water proof."

State supervisors had the following to say:
"I like several types of materials so as to give education to all."

"This depends on the money which is available. There are excellent tops in the best grades of each material."

A city supervisor stated: "Monel metal is the most successful. Much of our equipment has been used for ten years."

To summarize the opinions of 131 homemaking educators concerning the most satisfactory materials for work table surfaces it may be seen that a majority of the educators who commented on enameled metal would not recommend it. A large majority of the educators

Original tables showing complete data on file in Home Economics Education Office, Oregon State College.
would recommend linoleum for work table surface tops, and a majority of persons approve of metal alloys. A slight majority of the educators who expressed their opinions relative to porcelain enamel disapprove of this material. A majority of homemaking educators who commented on the merits of wood for work table surfaces stated that they recommend this material.

The main reasons given for disapproving of enameled metal were that it chips off and it is noisy. That it is durable and easily cleaned was recognized by several as an advantage of this material for the work surfaces.

Reasons given for the general approval of linoleum as a work table surface were that it is easily cared for, inexpensive, noiseless, durable, and attractive.

A majority of educators recommended metal alloys for work table surfaces. The reasons for their decisions were: it is durable, easily cared for, and attractive. The main reasons given by the notable numbers of persons who disapproved of the metal alloys were that it is expensive and easily stained.

There was a small margin of disapprovals over the approvals relative to the use of porcelain enamel for work table surfaces. The reasons cited for not recommending this material were that it is noisy and it chips. The merits of the porcelain enamel were pointed out to be that it is easy to clean, it is durable, and it is attractive.

Of the majority who recommended wood for work table surfaces, many did not specify any wood other than that it should be some hard
wood. Of the specific woods mentioned maple was favored, but oak, birch, and hard pine were mentioned by several persons. The main reasons cited in favor of the hard wood surface were that it is easy to care for and it gives good service.

Of the other types of work table surface materials which were mentioned, tile was favored because it is easily cared for, is durable, and is not easily stained. Bakelite was favored by six persons because, in their opinion, it is heat resistant, does not stain easily, and is easily cleaned. Four persons approved of cork on the basis that it is inexpensive, easily cared for, and does not cause breakage.

**Summary of Opinions Concerning Materials Recommended for Small Equipment and Work Table Surface**

An analysis of the opinions of 131 homemaking educators indicate that certain materials may be definitely preferred for certain utensils. For baking pans, pressed aluminum is favored by a majority of educators, but tin and heat proof glass have a substantial number of persons approving them. Casseroles are preferred of pyrex by 107 persons. Earthenware is favored by 50 persons. Other materials were scarcely mentioned as being preferable.

For double boilers, a majority preferred pressed aluminum. However, a notable number approved of enameled ware. Heat proof glass was favored by 18 educators. Stainless steel was mentioned by six persons. Heat proof glass was preferred for measuring cups by a majority of persons. Closely following in preference, however, was
aluminum. Plastics and tin were recommended by 15 persons. Other materials were not recommended for measuring cups by more than one person.

Pottery mixing bowls were favored by 100 of these educators. Twenty-five educators approved of heat proof glass mixing bowls, and 15 persons recommended enameled ware. Aluminum sauce pans were preferred by 88 persons; enameled ware was favored by 39 individuals, and 20 persons recommended stainless steel sauce pans.

These educators expressed preferences for and disapproval of certain materials for work table surfaces. A majority of the educators who commented on enameled metal would not recommend it. A large majority of the educators would recommend linoleum, and a majority of persons approve of metal alloys. A slight majority of the educators who expressed their opinions relative to porcelain enamel disapprove of this material. A majority of homemaking educators who commented on the merits of wood for work table surfaces stated that they recommend this material.

The main reasons given for disapproving of enameled metal were that it chips off and it is noisy. That it is durable and easily cleaned was recognized by several as an advantage of this material for the work table surface. Reasons given for the general approval of linoleum were that it is easily cared for, is inexpensive, noiseless, durable, and attractive.

A majority of educators who expressed their opinion regarding metal alloys for work table surfaces would recommend it. The reasons for their decisions were that it is durable, it is easily cared for,
and it is attractive. The main reasons given by the notable number of persons disapproving of the metal alloys were that it is expensive and easily stained.

These educators who commented on porcelain enamel for work table surfaces were rather equally divided in their approval and disapproval of the material with a slight majority favoring the material. The reasons cited for not recommending this material were that it is noisy and it chips. The merits of the porcelain enamel were pointed out to be that it is easy to clean, it is durable, and it is attractive.

Of the majority who recommended wood for work table surfaces many did not specify any wood other than that it should be some hard wood. Of the specific woods mentioned maple was favored, but oak, birch, and hard pine were mentioned by several persons. The main reasons cited in favor of the hard wood surface were that it is easy to care for and it gives good service.

Of the other types of work table surface materials which were mentioned, tile was favored because it is easily cared for, and is durable. Bakellite was favored by six persons because, in their opinion, it is heat resistant, does not stain easily, and is easily cleaned. Four persons approved of cork on the basis that it is inexpensive, easily cared for, and does not cause breakage.
CONCLUSIONS AND RECOMMENDATIONS

As the title suggests, this is a study of the opinions of leaders in the field of home economics education. One hundred thirty-one teacher trainers, state supervisors, and city supervisors contributed their beliefs and decisions concerning locating, arranging, and equipping homemaking departments. The judgment of these experienced educators represents the thinking of leaders in the field throughout the United States and Hawaii. In some of the problems the opinions and practices of the commentators were sufficiently similar to enable the investigator to draw conclusions based on significant numbers of persons and these common tendencies are reviewed in this chapter.

It may be said that locating, arranging, and equipping homemaking departments presents unsolved problems to educators in the field. Probably the establishment of a common philosophy of home economics education and a standardization of communities and children would be necessary before any principles could be established and applied. Perhaps for the sake of clarifying a situation for consideration, we may eliminate the innumerable factors of individual cases and determine what a home economics educator would do should there be no restricting conditions, and she were given an open road in creating a homemaking department which might best express and project her philosophy.

The matter of locating the department would be an initial concern. A majority of homemaking educators would choose to have the homemaking
department within the main high school building rather than in a separate cottage. They recognize that either location offers certain advantages, but the convenience in having the department in the main building, the desire to have homemaking an integral part of the pupil's school life, and the economy of building and maintaining the department would favor the school building.

It would be a misrepresentation to recommend irrevocably the location within the school building without recognizing certain definite advantages in the separate cottage. According to the present homemaking education leaders the separate cottage provides more opportunity for creating a home atmosphere, and thereby makes more effective the instruction, since less adaptation is necessary in applying learnings to home activities. These leaders point out that a cottage provides a background which better expresses the whole concept of the home, and the care and use of the rooms and equipment becomes a real experience. It is believed that the cottage tends to stimulate interest in the homemaking program, since school and community social centers may be established in the cottage. Furthermore, this may be a way of providing more economically some additional space for homemaking instruction. The success of either location will depend on the size of classes, the teacher, the location of the department with respect to the rest of the school, and the facilities and funds available. The advisable course of action would seem to be to plan the broad homemaking program in line with the community life, economic level, and the specific school situation; then plan a plant which will take care of as many as possible of the important aspects
of the program.

Having decided on the location of the department, the planner would tackle the problem of what type of room arrangement would lend itself most effectively to meeting the needs of her pupils in light of the planned program. An analysis of the data relative to the types of room arrangements for homemaking departments shows that a majority of educators do not believe that they could choose any one type as being superior for all situations. The combination room providing for the rotation of all the homemaking activities within one room was considered most desirable. The success of such a room, however, depends on the ability of the teacher to carry on several major activities at one time so that a maximum of learning occurs.

The combination room which provides adequate space and equipment for each class member to carry on the same type of activity at the same time was approved from the viewpoint that such an arrangement provides training and experience for each individual pupil, since it allows ample space for activities where all members of the group are doing either similar or different activities. Such a plan was criticized in that it presupposes regimentation and encourages methods of teaching which do not recognize individual needs and personalities.

A plan which provides one laboratory for foods and another laboratory for clothing may be approved for situations where large classes must be handled. This plan provides a situation where learning within the specific area of foods or clothing may be directed without confusion. However, such a plan was criticized for
departmentalizing homemaking and putting too much emphasis on the food preparation and clothing construction phases. Homemaking educators believe that if there is an apartment in addition to the two laboratories, the arrangement serves broader purposes and provides for a greater variety of experiences; but if the apartment is not well used, it may be too costly for the good derived from it.

The plan which provides a dining room in addition to the two laboratories may be criticized because so few pupils may use the dining room at one time, and the serving tables provided with each preparation unit lends more opportunities for serving the food from each preparation lesson. The living room in addition to the foods and clothing laboratories may be regarded as satisfactory since it serves more purposes than does the dining room. The character of such a living-dining room and the uses to which the room is put determines the value of such a plan.

An analysis of the date relative to different arrangements for serving meals indicates that no one arrangement may be recommended for all situations. Combinations of small tables with the preparation units and the living-dining area may be regarded as desirable. The small tables are considered desirable in any situation because serving can be taught as a part of meal preparation and every one in the class may have an opportunity to gain experience in serving. In addition, the small tables are considered economical of time, space, and energy.

A corner or end of the homemaking room or laboratory arranged as a dining center has advantages as well as some disadvantages.
Such an arrangement is an economical way of providing a serving area for class work and provides for other activities in the one room. The plan may be criticized because it provides for only part of the class at one time and is not economical of time and steps. Some educators believe that it increases confusion in serving meals, and conflicts with the rest of the class who are not using the center.

It would seem unwise to plan a separate dining room as a serving center since other plans for serving have proved to be more purposeful. The dining room is regarded as impractical, expensive, serves too few pupils, and encourages inefficient management of steps and time. Some teachers find some advantages in the dining room in that it provides an attractive home situation for setting standards, and it is useful to the homemaking department for rotation of groups.

As was pointed out in connection with the types of room, the living-dining room may be regarded as desirable, since it is typical of many homes and provides opportunity for varied types of activities.

It may be assumed that the philosophy of educating for homemaking which one has will largely determine the type of room and the serving arrangement which one would choose. If the paramount objective of the educator is to establish skills in working, the one-room laboratory equipped for practice will be preferred. If the aim is to develop learnings relative to foods along with other homemaking activities, then various combinations of working areas and rooms will be featured.

In general, the trend appears to be in favor of the unit kitchen for a work unit. Increased emphasis is being placed on typifying the
home kitchen as much as is possible, in respect to appearance, arrangements which conserve time and energy, and in originality and individuality. A majority of the educators would provide unit kitchens for four pupils.

It is evident from the limited study of unit kitchen patterns involved in this study that there may be many different arrangements of sink, stove, work surface, cabinet, and table within a unit. Some of these patterns may be described as U-shape, L-shape, parallel units, and wall units. There are advantages and disadvantages to each of the patterns, but the innumerable variations possible in each plan makes it necessary for further investigation to be done before any definite conclusions may be drawn.

It may be concluded from this study that the sink should have counter space on both sides, adjoin the food preparation center, and be near the meal table. The stove should join the food preparation table and be near the serving center. Units should feature different equipment and materials, and, as much as is possible, the equipment should be movable.

It is apparent that the availability of funds would influence the plan of the foods room. The amount of floor space, the number of work units, and the amount of equipment would be modified in cases where funds are limited. For small classes the amount of floor space and the number of work units should be reduced. In some cases it would seem wise to adjust to limited funds and small classes by planning for a combination room in which different activities would be rotated. Some adjustments which may be made for classes of over
twenty-four pupils are: to increase the size of the laboratory, to use additional rooms, to provide more working units, to put more girls in each unit, to rotate activities, and to use more demonstrations.

It may be said that there is no need for the foods room of junior high schools to be different from the room recommended for the senior high school classes. The unit kitchen and the combination room is recommended for either age group.

In any plan for a homemaking department, one ultimately faces the problem of what and how much small equipment is desirable. The present homemaking education leaders would provide each unit with one or more of several sizes of utensils. For example, they would have one or two small size sauce pans, one or two medium size, and one large size sauce pan. In the case of such equipment as frying pans and double boilers it would seem unnecessary to have several of the different sizes. One size of muffin tin would be adequate, but there should be two tins in each unit. There are advantages in having more than one type of egg beater in the units. The total number of a single utensil for each unit kitchen will vary, but this study would indicate that there should be four sauce pans, two frying pans, one double boiler, one muffin tin, and two egg beaters.

The results of this study indicate that it would be wise to have some equipment stored elsewhere in the room in addition to that which is stored within the units. Sets of six to twelve in dinnerware would be desirable. Of the kitchen utensils, six medium size sauce pans, two large size frying pans, one or two medium size double boilers, six 8-muffin tins, and six extra egg beaters would be
desirable stored in cabinets in the room. In general, these educators believe that two to six of the basic pieces of equipment might very advisedly be stored out in the foods room, in addition to the number which would be stored within the units.

It may be concluded from this study that groups of four pupils are more advisable than are groups of two because this number more nearly represents the typical family, and four girls work well together. Units for four are more economical, may be used for smaller groups when necessary, and provides the advantages of larger working spaces and less confusion in supervision. Groups of two have the advantage of giving more opportunity for individual work.

It is evident from this investigation that the equipment in the units should differ. This provides additional variety of experiences in using, studying, and evaluating the different kinds of equipment through rotation of activities; it gives the pupils more opportunity for comparison in consumer education studies; it provides situations in which different standards of equipment may be exhibited; and, differing conditions in the homes may better be exemplified, particularly with respect to different social levels. The advantage of having all the units equipped alike is that it is easier to give unified directions when time is limited and pupils are inefficient, as at junior high school level.

It is considered by homemaking educators to be advantageous to have a maximum limit of 24 for foods classes, but some educators believe as many as 32 pupils in one class can work efficiently.

As was pointed out in connection with planning the work units,
groups of four have proved to be the most effective, because the individual pupils get more experience in using space and equipment. It is recommended that the groups should resemble the size of the families in the community. The flexibility of time, the maturity and experience of the pupils, the equipment provided, and the number in the class influence the number that should be grouped into one working unit.

According to the results of this study it would seem unwise to plan for each member of the class to have equipment sufficient for cooking, serving, and eating a simple meal so that each pupil could use this equipment at the same time. It is considered too expensive for the value received and represents wasted space and money because the average length of period does not permit pupils to work alone, and no variety is afforded in class. Furthermore, it is believed that the family, rather than the individual, should be the basis of the class work. Group work provides opportunity for cooperation, division of labor, leadership in taking responsibilities, management, and economy in use of equipment.

Standard equipment for meal preparation seems desirable since the same equipment may, if necessary, be used in developing skills with single foods. It is believed that the emphasis should be put on the home situation instead of on single foods. Equipment should be family size, equivalent to serving four or six servings.

It is evident from the information gathered in this study that some materials are preferable for certain utensils. For baking pans, pressed aluminum is favored, but tin and heat proof glass have been
found to be satisfactory. Pyrex or earthenware casseroles have proved to be the most satisfactory, with the preference being given to pyrex. Pressed aluminum double boilers are preferred, but enamel ware may be substituted as second choice. Heat proof glass or aluminum measuring cups are satisfactory. For mixing bowls the order of preference is pottery, heat proof glass, and lastly, enameled ware. Aluminum sauce pans are recommended, but enameled ware pans have proved satisfactory in many foods kitchens.

For work table surfaces it would seem that linoleum has proved to be most satisfactory, but enameled metal is also recommended. Metal alloys and wood have proved to be desirable in many foods kitchens. The main reasons for discrediting enameled metal are that it chips off easily and it is noisy. That it is durable and easily cleaned is recognized as an advantage. Linoleum is favored because it is easily cared for, is inexpensive, noiseless, durable, and attractive. Favorable characteristics of metal alloys for work table surfaces are that it is durable, easily cared for, and attractive. The main criticism of this material is that it is expensive and easily stained. Although porcelain enamel is easy to clean, durable, and attractive, it is noisy and it chips easily.

Hard wood table surfaces were approved because they are easy to care for and they are serviceable. Oak, birch, and hard pine have been found to be satisfactory. Tile is easily cared for, and is durable, but the hard surface causes much breakage of dishes. Bakelite is heat resistant, does not stain easily, and is easily cleaned. Cork is inexpensive, easily cared for, and does not cause
breakage.

The completed department, created according to suggestions given by one hundred thirty-one homemaking educators, will be a combination room providing for the rotation of all the homemaking activities and located within the main high school building. There will be individual serving tables provided with each food preparation unit, with a separate living-dining area where the pupils may gain experience in more varied activities. Unit kitchens equipped for four pupils will provide the facilities for food preparation and serving. The sink in the kitchen will have counter space on both sides, will adjoin the food preparation center, and will be near the meal table. The stove will join the food preparation table and be near the serving center. The equipment in the different units will vary in order to provide for additional studies of equipment, and as much as is possible, the equipment will be movable. There will be one or two of each of several sizes of utensils in each unit. There will be sets of six to twelve of dinner and silverware stored out in the room, as well as two to six of the basic pieces of equipment. The size of the equipment will be for the average family of the community. Baking pans, double boilers, and sauce pans will be of pressed aluminum. Casseroles and measuring cups will be of pyrex, and mixing bowls will be of pottery. The work surfaces will be covered with linoleum.

In conclusion, it may be said that the plan of the room and the equipment will depend on the breadth of the course, the school, the economic level, and the physical facilities available. The plant
should be homelike, permit a broad course, permit activities to be done as they are done at home, and be such as to permit up-to-date methods of teaching and learning.
THE COMMENTS OF THE HOMEMAKING EDUCATION LEADERS

CONTRIBUTED ON THE QUESTIONNAIRES

State Supervisor from Maine:
"I found that the type of information desired is one that should take considerable time and thought."

Kansas State teacher trainer:
"My first reaction on the majority of these questions is 'that depends.' I think there is no hard and fast rule that can be set."

Opinions Relative to Locating the Homemaking Department Within the School Building

Teacher trainers:
"Homemaking departments need very, very careful planning to be a part of a big building (same is true of other subject matter fields.)"

"The location within the school building is most desirable for rural schools."

State supervisors:
"North Carolina recommends the one-room combination laboratory within the high school building for schools having an enrollment under 150 with one teacher."

"Florida recommends an apartment within the school building. A bedroom is not essential. A combination room equipped with furniture of multiple uses is desirable. A living-dining area, also to be used for discussions in groups."

Opinions Relative to Locating the Homemaking Department in a Separate Cottage

Teacher trainers:
"In some cases it might discourage carryover of home economics training into homes from which they come."

State supervisors:
"With a separate cottage there is the problem of vandalism."

"The cottage is artificial at best."
Opinions Relative To the Combination Homemaking Room or Rooms Which Provide Adequate Space and Equipment for Each Member of the Class to Carry on the Same Type of Activity at the Same Time

Teacher trainer:
"This is satisfactory if all members of the class are mature and they need or want to practice for the purpose of attaining skills for wage earning."

State supervisor:
"Such a room is valuable as an activity room."

City supervisor:
"With a unit kitchen in one end of the foods room adjoining this three-in-one room, pupils get the same experiences as with a full apartment."

Opinions Relative to the Combination Homemaking Room or Rooms Providing Only Space and Equipment for Rotation of Activities

Teacher trainer:
"Good to have an apartment or cottage in addition."

State supervisors:
"I prefer provision for all activities in a work room. This gives opportunity for setting a program on individual or small group need of the girls."

Opinions Concerning the Homemaking Department Which Provides Separate Rooms for Foods and Clothing

Teacher trainers:
"More than foods and clothing should be taught."

"Informal living center should supplement."

Opinions Concerning the Homemaking Department Which Provides Separate Rooms for Foods, Clothing and Dining Room

Teacher trainer:
"Living room can be used as a dining center."

City supervisor:
"A good teacher can make a dining room work hard."
Opinions Relative to the Homemaking Department Which Provides Separate Rooms for Foods, Clothing and a Living Room that Could be Used for Dining

Teacher trainer:
"Additional tables for meal service should be provided in the foods room in connection with kitchen units."

City supervisor:
"With a roll-away, in-a-door bed, this room can be used to demonstrate bed making."

Opinions Relative to the Homemaking Department Which Provides Separate Rooms for Foods, Clothing, and an Apartment

Teacher trainers:
"An apartment that is closed except when visitors come is of little value."

"It would be better to provide for such experiences as bed making, and caring for the bathroom in some other way."

"In large departments with two, three, or four teachers this might be desirable. I would then prefer a foods room and a second room for all other homemaking activities including clothing."

City supervisor:
"The home project plan and teacher home visiting give place for application in care of these rooms."

Opinions Relative to Small Tables Provided for Each Unit Kitchen or Unit Desk

Teacher trainer:
"Cooperation and time management may be used to greater advantage."

City supervisors:
"As nearly as possible a unit such as is found in a home is desirable."

"In our new kitchens we have unit type arrangements and the small tables are needed."
Opinions Relative to a Corner or End of Laboratory or Homemaking Room Arranged as a Dining Center

Teacher trainers:
"Advisable to have two corners so that two groups may be serving."

"Arrange the room in order that it has as normal a home appearance as is possible without sacrificing waste of time because of steps necessary for laboratory work."

"Has possibilities. Tends to be inefficient particularly for those desks farthest from the center."

City supervisors:
"Better than not having one."

"May be necessary, but is not ideal."

Opinions Relative to a Separate Dining Room

Teacher trainers:
"There should be a serving table with each unit."

"A dining room offers experience in consumer education, home decoration, and a more natural setting for raising standards."

State supervisors:
"Gives you a room that is used very little. Better have more space where it will be used more."

"A living room which can be used for dining is better."

City supervisor:
"Time and steps may be saved when dining equipment is within the laboratory."

Opinions Relative to Both the Small Tables and the Separate Dining Room

Teacher trainers:
"A dining room is desirable. If dining room and living room are not both available, I prefer a living room which can be used as a dining room. I feel that this is more desirable for social functions."

"A dining room is desirable, but not necessary."
Opinions Relative to a Living Room Which Can Be Used for Dining As Well as for Other Activities

Two teacher trainers, a state and a city supervisor commented: "The living-dining room is much better than the separate dining room because of increased usefulness of the room."

Other comments from these homemaking leaders: "If it is a choice between substituting a living room and small tables, I would prefer the living room. It would be used more and the cost could be justified."

"Frequent experiences in serving even simple food combinations are desirable. In addition, on some occasions meals should be served apart from the preparation center."

Other Desired Arrangements for Serving Meals

City supervisor: "The small tables save time and give an opportunity for the correct serving of a single food prepared during a class period. The dining room is necessary for pupils to have practice in a situation similar to the home."

Explanation of Combination Rooms Referred to in Table 14

<table>
<thead>
<tr>
<th>Combination Rooms Referred to in Table 14</th>
<th>Teacher Trainers</th>
<th>State Supervisors</th>
<th>City Supervisors</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foods and Clothing:</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Foods and Laundry:</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Foods, Clothing and Laundry:</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Foods, Clothing and Living Center:</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Foods, Clothing, Living, and Bedroom:</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Foods, and Living Center</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Foods, Clothing, Laundry, and Living Center:</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Foods, Clothing and Lunch:</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Foods, Living, and Bedroom:</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Comments Relative to Equipment as Related to the Room Arrangements

"Serving tables should be of the same type. Tables of the same size in each unit make it possible to put the tables together for large groups."

"Supply table on wheels is advisable because then it can be moved any place in the room."

Comments on Modifications of the Foods Room for a Situation Where Separate Rooms and Equipment are Provided for Junior High School and Senior High School Pupils

Teacher trainer:
"In the senior high school there is apt to be less need of unit kitchens for all to use at the same time. More independence in selection of activities is possible."

State supervisors:
"Even if junior high girls only help with the meals at home, they help in a kitchen."

"I would place even more emphasis on 'sharing family life' at the junior high school level—providing for home activities."

City supervisors:
"Three different heights for the working surfaces in the unit kitchens. Classes rotate and try them all. (This is not intended to accommodate pupils of various heights.)"

"Arrangement the same but senior high school equipment would need to be more extensive; include a greater variety of utensils both as to type and materials."

"Junior high pupils need the combination room arrangement more than the senior high pupils."

"Junior High school pupils require more supervision. Units of equipment could be planned to allow for this. Also the work is more exploratory in junior high. I think they need a laundry unit, and a living center."
## TABLE

Amount of Equipment to be Stored in
The Room Other than Within the Units

<table>
<thead>
<tr>
<th>Articles of Equipment</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TRH</td>
</tr>
<tr>
<td><strong>Dinnerware:</strong></td>
<td></td>
</tr>
<tr>
<td>Plates, dinner or supper:</td>
<td></td>
</tr>
<tr>
<td>Two to five plates, inc.:</td>
<td>3</td>
</tr>
<tr>
<td>A set of six:</td>
<td>5</td>
</tr>
<tr>
<td>A set of eight:</td>
<td>1</td>
</tr>
<tr>
<td>A set of twelve:</td>
<td>10</td>
</tr>
<tr>
<td>Twenty-four or more:</td>
<td>5</td>
</tr>
<tr>
<td><strong>Cups and saucers:</strong></td>
<td></td>
</tr>
<tr>
<td>Two to four, inc.:</td>
<td>2</td>
</tr>
<tr>
<td>A set of six:</td>
<td>6</td>
</tr>
<tr>
<td>A set of eight:</td>
<td>1</td>
</tr>
<tr>
<td>A set of twelve:</td>
<td>10</td>
</tr>
<tr>
<td>Twenty-four or more:</td>
<td>5</td>
</tr>
<tr>
<td><strong>Silverware:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Knives:</strong></td>
<td></td>
</tr>
<tr>
<td>Two to four:</td>
<td>1</td>
</tr>
<tr>
<td>A set of six:</td>
<td>6</td>
</tr>
<tr>
<td>A set of eight:</td>
<td>0</td>
</tr>
<tr>
<td>A set of twelve:</td>
<td>11</td>
</tr>
<tr>
<td>Twenty-four or more:</td>
<td>4</td>
</tr>
<tr>
<td><strong>Forks:</strong></td>
<td></td>
</tr>
<tr>
<td>Two to four:</td>
<td>2</td>
</tr>
<tr>
<td>A set of six:</td>
<td>6</td>
</tr>
<tr>
<td>A set of eight:</td>
<td>0</td>
</tr>
<tr>
<td>A set of twelve:</td>
<td>12</td>
</tr>
<tr>
<td>Twenty-four or more:</td>
<td>4</td>
</tr>
<tr>
<td><strong>Kitchen Utensils:</strong></td>
<td></td>
</tr>
<tr>
<td>Sauce pans: (Smaller than one quart)</td>
<td></td>
</tr>
<tr>
<td>One or two:</td>
<td>4</td>
</tr>
<tr>
<td>Three or four:</td>
<td>3</td>
</tr>
<tr>
<td>Six:</td>
<td>4</td>
</tr>
<tr>
<td>Twelve:</td>
<td>1</td>
</tr>
</tbody>
</table>
### TABLE

<table>
<thead>
<tr>
<th>Articles of Equipment</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT</td>
</tr>
<tr>
<td><strong>Kitchen utensils (continued)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Sauce pans (continued)</strong></td>
<td></td>
</tr>
<tr>
<td>One to 1/2 quarts:</td>
<td></td>
</tr>
<tr>
<td>One:</td>
<td>6</td>
</tr>
<tr>
<td>Two:</td>
<td>7</td>
</tr>
<tr>
<td>Three:</td>
<td>2</td>
</tr>
<tr>
<td>Four:</td>
<td>7</td>
</tr>
<tr>
<td>Six:</td>
<td>7</td>
</tr>
<tr>
<td>Twelve or more:</td>
<td>1</td>
</tr>
<tr>
<td>Larger than 1/2 quarts:</td>
<td></td>
</tr>
<tr>
<td>One:</td>
<td>2</td>
</tr>
<tr>
<td>Two:</td>
<td>4</td>
</tr>
<tr>
<td>Four: or Four to six:</td>
<td>2</td>
</tr>
<tr>
<td>Six:</td>
<td>5</td>
</tr>
<tr>
<td><strong>Frying pans:</strong></td>
<td></td>
</tr>
<tr>
<td>Smaller than 6 inches:</td>
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</tr>
<tr>
<td>Two:</td>
<td>4</td>
</tr>
<tr>
<td>Six to twelve:</td>
<td>2</td>
</tr>
<tr>
<td>Six to eight inches:</td>
<td></td>
</tr>
<tr>
<td>One or two:</td>
<td>6</td>
</tr>
<tr>
<td>Three or four:</td>
<td>2</td>
</tr>
<tr>
<td>Six:</td>
<td>3</td>
</tr>
<tr>
<td>Larger than 8 inches:</td>
<td></td>
</tr>
<tr>
<td>One:</td>
<td>3</td>
</tr>
<tr>
<td>Two:</td>
<td>10</td>
</tr>
<tr>
<td>Three:</td>
<td>2</td>
</tr>
<tr>
<td>Four:</td>
<td>4</td>
</tr>
<tr>
<td>Six:</td>
<td>5</td>
</tr>
<tr>
<td><strong>Double boilers:</strong></td>
<td></td>
</tr>
<tr>
<td>One quart:</td>
<td></td>
</tr>
<tr>
<td>Six:</td>
<td>2</td>
</tr>
<tr>
<td>Two quarts:</td>
<td></td>
</tr>
<tr>
<td>One:</td>
<td>1</td>
</tr>
<tr>
<td>Two or three:</td>
<td>2</td>
</tr>
<tr>
<td>Four or six:</td>
<td>0</td>
</tr>
<tr>
<td>Larger than two quarts:</td>
<td>4</td>
</tr>
</tbody>
</table>
TABLE

<table>
<thead>
<tr>
<th>Articles of Equipment</th>
<th>Number of Times Given by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TT#</td>
</tr>
<tr>
<td>Kitchen utensils (continued)</td>
<td></td>
</tr>
<tr>
<td>Muffin tins:</td>
<td></td>
</tr>
<tr>
<td>Eight muffin tin:</td>
<td></td>
</tr>
<tr>
<td>One:</td>
<td>2</td>
</tr>
<tr>
<td>Two or three:</td>
<td>4</td>
</tr>
<tr>
<td>Four:</td>
<td>1</td>
</tr>
<tr>
<td>Six:</td>
<td>8</td>
</tr>
<tr>
<td>Twelve:</td>
<td>3</td>
</tr>
<tr>
<td>Egg beaters:</td>
<td></td>
</tr>
<tr>
<td>No type indicated:</td>
<td></td>
</tr>
<tr>
<td>One or two:</td>
<td>5</td>
</tr>
<tr>
<td>Three:</td>
<td>2</td>
</tr>
<tr>
<td>Four:</td>
<td>2</td>
</tr>
<tr>
<td>Six:</td>
<td>3</td>
</tr>
</tbody>
</table>

#TT-Teacher trainers; SS-State supervisors; CS-City supervisors.
To Supervisors, Teacher Trainers and Teachers of Homemaking:

We are making a research study of space and equipment for teaching all phases of foods and nutrition which are taught in the homemaking classes of secondary schools. To make this widely useful we need the judgment of leaders in homemaking education. We shall appreciate your assistance if you will fill out this check list and return it as soon as possible.

If, when you reread the finished check list, your answers do not adequately represent your philosophy of homemaking education, will you please supplement them with additional comments?

Very truly yours,

Return check list to:  
FLORENCE E. BLAZIER  
Head, Home Economics Education  
Oregon State College  
Corvallis, Oregon

Name ........................................................................

Official position ..................................................................

Address ........................................................................

A STUDY OF EQUIPMENT FOR TEACHING FOODS IN SECONDARY SCHOOLS

Throughout this study whenever the term homemaking is used, it may be interpreted as including all the different units of the homemaking course, such as foods, clothing, child care, social relationships and consumer buying. By a department is meant room or rooms used for teaching homemaking.

LOCATION OF THE HOMEMAKING DEPARTMENT

In considering whether the homemaking department should be located in the high school building or in a separate cottage, please comment on these statements.

1. The homemaking department in the high school building is usually most advantageous.

2. The separate cottage is usually most advantageous.

3. The locations are equally useful.

4. Other comments on location:
TYPES OF ROOM ARRANGEMENTS FOR HOMEMAKING DEPARTMENTS

A great many factors determine the type of room arrangement which is recommended. Some of these factors are the philosophy and methods of teaching of the home economics teacher, the number of home economics teachers employed in the school and what the school district can afford.

Opposite each type of room arrangement will you check whether you approve or disapprove? Will you in each instance give the reason for your decision or state under what conditions you would approve of this type of room arrangement?

<table>
<thead>
<tr>
<th>Approve?</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

1. Separate rooms for foods and clothing
2. Separate rooms for foods, clothing, and dining room
3. Separate rooms for foods, clothing, and a living room that could be used for dining
4. Separate rooms for foods, clothing, and an apartment consisting of living room, a bedroom, dining center, kitchen and bath
5. Combination homemaking room or rooms providing adequate space and equipment for each member of the class to carry on the same type of activity at the same time. For example, in this arrangement all pupils could cook the same food at the same time or could sew at the same time
6. Combination homemaking room or rooms providing only space and equipment for rotation of activities. For example, space and equipment for one or two groups of pupils to prepare food while other pupils carry on such activities as planning meals, cleaning rooms or sewing
7. Other types—list:

ARRANGEMENTS FOR SERVING MEALS

Opposite each type will you indicate whether you approve or disapprove? Will you in each instance give the reason for your decision or state under what conditions you would approve of this type?

<table>
<thead>
<tr>
<th>Approve?</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

1. Small tables provided for each unit kitchen or unit desk
2. Corner or end of laboratory or homemaking room arranged as a dining center
3. Separate dining room
4. Both small tables and separate dining room
5. A living room which can be used for dining as well as other activities
6. Other desired arrangements—list:
ROOM ARRANGEMENTS FOR TEACHING FOODS

By a rough sketch indicate the room arrangement you would choose for high school classes of 24 pupils. Be specific enough to show any grouping together of stove, sink, work table and storage space for cooking utensils and dishes. Indicate on the sketch the number of pupils who could satisfactorily be provided for in each group arrangement during a single class period.

The three questions which follow apply to the arrangements of large pieces of equipment which you sketched.

1. How would you modify this arrangement for a situation in which funds are very limited?

2. How would you modify this arrangement for a school where classes are usually small (under 18)?

3. How would you modify this arrangement for a school where classes are usually large (over 24)?

4. Would your decision for arrangement be the same if you were providing separate rooms and equipment for junior high school pupils and for senior high school pupils? Comment.
### SELECTION OF SMALL EQUIPMENT

If you were equipping a room to be used for teaching foods with six unit kitchens, each equipped for four pupils, please state the number of each of the following articles of equipment you would select, assuming financial conditions which would permit any number you desired. (The list is illustrative only and not to be regarded as a complete set of utensils.)

#### Articles of Equipment

<table>
<thead>
<tr>
<th>Equipment</th>
<th>No. stored in unit kitchen</th>
<th>No. stored elsewhere in room</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dinnerware</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plates, dinner or supper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cups and saucers</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Silverware used for table service</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forks</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Kitchen utensils</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sauce pans—smaller than 1 qt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 1 1/4 qts.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Larger than 1 1/4 qts.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frying pans—smaller than 6 in.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 in. to 8 in.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Larger than 8 in.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double boilers (appr. size)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muffin pans (8-muffin)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egg beaters</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If funds were available, would you plan a unit kitchen for each two pupils rather than one for four pupils? Yes... No...

Comment:

Should each unit kitchen have the same equipment? Yes... No...

Comment:

### PRACTICES IN TEACHING FOODS

Should there be a maximum size for a foods class? Yes... No...

If so, what should be this maximum?...

**Meal service**

If foods classes are divided into working groups, what size group is most effective when pupils are preparing meals?...

Comment:

Do you recommend that each member of the class should be provided with equipment sufficient for cooking, serving and eating a simple meal so that each pupil could use this equipment at the same time? Yes... No...

If less than this amount of equipment is needed please explain:

If more than this amount is needed please explain:

**Preparation of a single food, such as cocoa or creamed potatoes**

In addition to the equipment needed for meal service, is equipment needed for preparing a single food? Yes... No...

Comment:

If so, indicate sizes desired in terms of servings prepared:

### Materials Recommended for Small Equipment and Work Table Surface

Following is a list of frequently used equipment. In the column provided, indicate the material or materials which you consider most satisfactory for that particular utensil.

<table>
<thead>
<tr>
<th>Utensils</th>
<th>Material or materials which you consider most satisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baking pans</td>
<td></td>
</tr>
<tr>
<td>Casserole</td>
<td></td>
</tr>
<tr>
<td>Double boiler</td>
<td></td>
</tr>
<tr>
<td>Measuring cups</td>
<td></td>
</tr>
<tr>
<td>Mixing bowl</td>
<td></td>
</tr>
<tr>
<td>Sauce pan</td>
<td></td>
</tr>
</tbody>
</table>

In the following check the type of work table surface which you prefer:

<table>
<thead>
<tr>
<th>Material</th>
<th>Approve?</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enameled metal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linoleum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metal alloys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porcelain enamel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood (specify kind)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other types:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

*List of Materials Available in Kitchen Utensils*

- Aluminum
- Cast
- Enameled ware
- Stainless steel
- Heat-proof glass
- Iron
- Earthenware
- Iron
- Cast
- Copper
- Tin