



Equipment for consumer homemaking and occupational training in child development and food areas
by Patsy Merritt Wegner

A thesis submitted in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE in Home Economics

Montana State University

© Copyright by Patsy Merritt Wegner (1975)

Abstract:

The purpose of the study was to develop lists of equipment that could be useful and that were necessary or desirable in dual curricula classrooms, with special emphasis on food service and child care service. The sample included 36 instructors who taught both consumer homemaking and occupational training courses in Montana, North Dakota, South Dakota, Oregon, Wyoming, Utah and Colorado.

Program classification lists were developed for Equipment Useful in Teaching Consumer Homemaking Child Development, Equipment Useful in Teaching Occupational Child Care Service, Equipment Useful in Teaching Dual Curricula Child Development/Child Care Service, Equipment Useful in Teaching Consumer Homemaking Foods, Equipment Useful in Teaching Occupational Food Service, and Equipment Useful in Teaching Dual Curricula Food/Food Service. Inventory status lists were developed for the Necessary and Desired Equipment for Child Development/Child Care Service Programs and Necessary and Desired Equipment for Foods/Food Service Programs.

Resulting information indicates that Child Development/Child Care Service Programs can be organized with a minimal amount of inexpensive equipment for the playschool. Occupational food service classes can be initiated into an established foods program without purchasing large amounts of additional equipment. Several schools have planned cooperative programs with the school cafeteria or neighboring nursery school and day care centers for additional learning experiences.

Statement of Permission to Copy

In presenting this thesis in partial fulfillment of the requirements for an advanced degree at Montana State University, I agree that the Library shall make it freely available for inspection. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by my major professor, or, in her absence, by the Director of Libraries. It is understood that any copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Signature

Patsy M. Wegner

Date

Sept. 22, 1975

EQUIPMENT FOR CONSUMER HOME MAKING AND OCCUPATIONAL TRAINING
IN CHILD DEVELOPMENT AND FOOD AREAS

by

Patsy Merritt Wegner

A thesis submitted in partial fulfillment
of the requirements for the degree

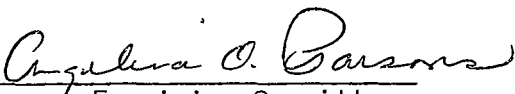
of

MASTER OF SCIENCE

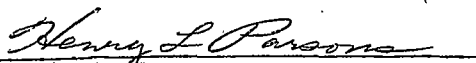
in

Home Economics

Approved:


Chairman, Examining Committee


Head, Major Department


Graduate Dean

MONTANA STATE UNIVERSITY
Bozeman, Montana

September 1975

ACKNOWLEDGMENT

A great deal of thanks is extended to the many people who helped to make this study a meaningful experience:

To the members of my Graduate Committee, Dr. Angelina Parsons, Dr. Majorie Keiser, Dr. Robert Lind, and Dr. George Hossack, who devoted time and interest to the study.

To the instructors who participated in the study.

To my parents, Mr. and Mrs. Howard Wegner, and friends, Debra Feller and Roxanne Araas, who offered support and encouragement when it was most needed.

TABLE OF CONTENTS

Chapter		
I.	INTRODUCTION	1
	Importance	1
	Purpose	2
	Limitations	3
	Definition of Terms	4
II.	REVIEW OF LITERATURE	
	History and Legislation of Vocational Education	6
	Purposes of Vocational Education	9
	Scope of Vocational Home Economics Programs	10
	Facility Planning and Equipment Needs	14
III.	PROCEDURES	
	Description of Population	16
	Selection of Sample	16
	Procurement of Data	17
	Description of Survey Instrument	17
	Method of Analysis	18
IV.	RESULTS AND DISCUSSION	
	Characteristics of the Sample	20
	State	20
	Classes	22
	Child Development Equipment	25
	Block-Building Center	26
	Housekeeping Center	27
	Creative Arts Center	27
	Science Center	29
	Quiet Play Center	29
	Lavatory Center	30
	Active Play Center	30
	Rest Center	30
	Lunch Center	31
	Observation Center	31
	Outdoor Play Center	32

Chapter

IV. RESULTS AND DISCUSSION

Food Equipment	33
Preparation Center	33
Serving Center	34
Dishwashing and Sanitation Center	36
Storage Center	37
Instructional Classroom Equipment for Child Development and Foods	37
Teacher Work and Conference Center	37
Presentation Center	38
Audio-Visual Center	38

V. SUMMARY, CONCLUSIONS, RECOMMENDATIONS

Summary	40
Recommended Lists of Equipment	41
Program Classification Listings	42
Child Development/Child Care Service Equipment Listings	42
Foods/Food Service Equipment Listings	46
Necessary and Desired Equipment for Child Development/Child Care Service Programs	46
Necessary and Desired Equipment for Foods/Food Service Programs	46
Conclusions	70
Recommendations	70

LITERATUR CITED	72
---------------------------	----

APPENDICES

Appendix A-Letter Requesting Names of Instructors Teaching Dual Curricula	75
Appendix B-Participation Request	79
Appendix C-Follow-up Letter	80
Appendix D-Survey Instrument	81
Appendix E-Resulting Data Tables	101
Appendix F-Respondents Data Tables	132

LIST OF TABLES

TABLE

1.	Home Economics Instructor Participation By State	21
2.	Class Size and Number of Reported Classes	23
3.	Enrollment of the Surveyed Schools	25
4.	Equipment Useful in Teaching Consumer Homemaking Child Development Classes	43
5.	Equipment Useful in Teaching Occupational Child Care Service Classes	44
6.	Equipment Useful in Teaching Child Development/Child Care Service Dual Curricula	45
7.	Equipment Useful in Teaching Consumer Homemaking Foods Classes	47
8.	Equipment Useful in Teaching Occupational Food Service Classes	50
9.	Equipment Useful in Teaching Consumer Foods/Food Service Dual Curricula	54
10.	Necessary and Additional Equipment for Child Development/Child Care Service Programs	57
11.	Necessary and Additional Equipment for Foods/Food Service Programs	63
12.	Items of Equipment for Child Development: Block-Building Center	101
13.	Items of Equipment for Child Development: Housekeeping Center	102
14.	Items of Equipment for Child Development: Creative Arts Center (Large Items)	103
15.	Items of Equipment for Child Development: Creative Arts Center (Small Items)	104

TABLE

16.	Items of Equipment for Child Development: Science Center	106
17.	Items of Equipment for Child Development: Quiet Play Center	107
18.	Items of Equipment for Child Development: Lavatory Center	108
19.	Items of Equipment for Child Development: Active Play Center	109
20.	Items of Equipment for Child Development: Rest Center	110
21.	Items of Equipment for Child Development: Lunch Center	111
22.	Items of Equipment for Child Development: Observation Center	114
23.	Items of Equipment for Child Development: Outdoor Play Center	115
24.	Items of Equipment for Foods: Preparation Center (Large Items)	116
25.	Items of Equipment for Foods: Preparation Center (Small Items)	117
26.	Items of Equipment for Foods: Serving Center (Large Items)	124
27.	Items of Equipment for Foods: Serving Center (Small Items)	125
28.	Items of Equipment for Foods: Dishwashing and Sanitation Center	127
29.	Items of Equipment for Foods: Storage Center	128
30.	Items of Equipment for Instructional Classroom: Teachers Work and Conference Center	129

TABLE

31.	Items of Equipment for Instructional Classroom: Presentation Center	130
32.	Items of Equipment for Instructional Classroom: Audio-Visual Center	131

LIST OF FIGURES

Figure I Definition of Heading Terminology 19

Figure II Longevity of Consumer Homemaking and Occupational Training
Courses in School Home Economics Programs by Percentage
of Schools 24

ABSTRACT

The purpose of the study was to develop lists of equipment that could be useful and that were necessary or desirable in dual curricula classrooms, with special emphasis on food service and child care service. The sample included 36 instructors who taught both consumer homemaking and occupational training courses in Montana, North Dakota, South Dakota, Oregon, Wyoming, Utah and Colorado.

Program classification lists were developed for Equipment Useful in Teaching Consumer Homemaking Child Development, Equipment Useful in Teaching Occupational Child Care Service, Equipment Useful in Teaching Dual Curricula Child Development/Child Care Service, Equipment Useful in Teaching Consumer Homemaking Foods, Equipment Useful in Teaching Occupational Food Service, and Equipment Useful in Teaching Dual Curricula Food/Food Service. Inventory status lists were developed for the Necessary and Desired Equipment for Child Development/Child Care Service Programs and Necessary and Desired Equipment for Foods/Food Service Programs.

Resulting information indicates that Child Development/Child Care Service Programs can be organized with a minimal amount of inexpensive equipment for the playschool. Occupational food service classes can be initiated into an established foods program without purchasing large amounts of additional equipment. Several schools have planned cooperative programs with the school cafeteria or neighboring nursery school and day care centers for additional learning experiences.

CHAPTER I
INTRODUCTION

Importance

The Vocational Act of 1963 allocated for the first time federal funds to the teaching of occupational home economics. A provision of the act read that ten percent of the federal grant money allotted for home economics had to be used in the actual preparation of students for gainful employment in home economics related occupations (Evans, 1969: 17). This gave impetus to a growing interest in occupational home economics. Programs began to change and new courses with job training objectives were offered.

According to the 1974-75 listings from the Office of the Superintendent of Public Instruction, only twelve of the 184 Montana schools offering consumer homemaking courses include occupational courses in the home economics curriculum. Based on that information as well as the contacts the home economics education supervisors had with school administrators and teachers, it was believed that often times occupational home economics was not incorporated into the curriculum because educators thought that it would involve the purchase of a large quantities of additional equipment. The supervisors requested help in determining the need for additional equipment when teaching a dual curricula. School administrators, school boards, state education supervisors, and home economics teachers needed additional information concerning kinds and amounts of equipment as

little was available. Two recommendations that resulted from the 1970 National Vocational and Technical Education meeting concerning facilities and equipment were:

1. More research be focused on the elements of facility and equipment planning.
2. Better and more realistic guides in condensed and simplified form be developed to aid individual responsibilities for planning vocational and technical facilities for the future (Larson, 1970: 9).

Purpose

The purpose of this study was to develop lists of equipment used in dual curricula classrooms where both consumer homemaking and occupational training programs could be taught. Special emphasis was placed on the child development/child care service and foods/food service areas. The study would also indicate the extra equipment needed to initiate occupational training courses into an established consumer homemaking program. Publication of the results will give educators a checklist for selecting equipment for consumer and/or occupational homemaking curricula. The specific questions to be answered were:

1. What equipment could be classified as being useful in teaching consumer homemaking in the child development area?
2. What equipment could be classified as being useful in teaching consumer homemaking in the foods area?
3. What equipment could be classified as being useful for teaching occupational child care service classes?
4. What equipment could be classified as being useful for teaching occupational food service classes?

5. What items of equipment could be classified as being useful in teaching child development and occupational child care service?
6. What items of equipment could be classified as being useful in teaching both consumer foods and occupational food service?
7. What items of equipment would be necessary for teaching a dual curricula in the child development area?
8. What items of equipment would be necessary for teaching a dual curricula in the food service area?
9. What additional equipment other than the basic requirements, could be purchased and defended as equipment for a department having a dual curriculum in child development areas?
10. What additional equipment other than the basic requirements, could be purchased and defended as equipment for a department having a dual curriculum in food service areas?

Limitations

Limitations were placed on the subject area, the state in which the sample was selected, and the instructors who participated. Child care service and food service were chosen for the study as these areas are the two most widely initiated occupational programs (Terras, February, 1974: 23). The states¹ included were believed to have school systems similar to Montana systems in school size, curriculum, budget, and student personality. Of necessity, participating teachers were those employed by these school systems between October 1974 and April 1975, who taught a dual curricula.

¹Montana, Nevada, North Dakota, South Dakota, Oregon, Wyoming, Washington, Utah, Idaho and Colorado.

Definition of Terms

The following definitions were selected to clarify the terminology used in the study.

Consumer Homemaking Education: Consumer and homemaking education refers to education designed to help individuals and families improve home environments and the quality of personal and family life, including instruction in food and nutrition, child development, clothing, housing, family relationships, and management of resources with emphasis on selection, use and care of goods and services, budgeting and other consumer responsibilities (Office of the Montana Superintendent of Public Instruction, January 1975: 154).

Occupational Training or Wage-Earning Education: Occupational home economics programs are designed to prepare individuals for gainful employment in occupations utilizing home economics skills and knowledge (Office of the Montana Superintendent of Public Instruction, January 1975: 152). Learning activities and experiences are organized to enable students to develop competencies essential for entry into their chosen occupations, to further training, or to acquire new or additional competencies for upgrading their occupational profession (Meckley, 1969: 12).

Dual Home Economics Curriculum: A Home Economics program organized in such a way that consumer homemaking classes and occupational training classes are taught by the same department and using the same facility and equipment, where possible. One teacher may instruct all classes, as in a small school, or there may be several staff members.

Facility: Something that is built, installed, or established to serve a particular purpose (Webster, 1967: 298). i.e. classroom, school building

Equipment: The implements used in an operation or activity, apparatus (Webster, 1967: 281). Large equipment: appliances, tables
Small equipment: egg beater, blocks

Supplies: The quantity or amount (as of a commodity) needed or available; expendable (Webster, 1967: 884). i.e. clay, groceries, paint

Child Development: Child development refers to the consumer home-making subject area dealing with the development, care and guidance of children.

Child Care Service: Child Care Service refers to an occupational training program. Classes would include the child development subject area and the occupational skills related to employment in child care centers.

Food: The food subject area refers to a consumer homemaking program dealing with the nutritional value, meal planning, food preparation, and service.

Food Service: Food Service refers to an occupational training program. Classes would include the foods subject area and also laboratory training and/or work experience in commercial and large quantity cooking.

Teacher or Instructor: These terms refer to an individual who teaches consumer homemaking and/or occupational training home economics in junior or senior high school.

CHAPTER II

REVIEW OF LITERATURE

This chapter provides an overview of literature concerning:

- (1) history and legislation of vocational education, (2) purposes of vocational education, (3) scope of vocational home economics and
- (4) facility planning and equipment needs.

History and Legislation of Vocational Education

The freedom to choose one's occupation has always been an important part of the American tradition. Historically, it was the father's responsibility to provide trade instruction for his son. Forms of apprenticeship whereby people learned a trade or art by working under a craftsman, however, changed this traditional idea. During the American colonization, orphans, children of the poor and those who chose to be craftsmen were offered apprenticeships (Barlow, 1965: 2). This education was directly related to the social and economic stability of the colonies. In the early years of the twentieth century as America was becoming more industrialized, education became more important for the development of occupational skills.

Federal aid for vocational education was initiated by the Morrill Act, 1862, which provided money for the construction of land grant colleges. Educational objectives of these colleges were founded on the basic needs of agriculture and industry. The Hatch Act, 1887, and the Smith Lever Act, 1914, also gave impetus to governmental participation at the college level (Barlow, 1965: 186).

In 1917, the Smith-Hughes Act focused attention on vocational education in the secondary schools. It provided for the nation "approximately seven million dollars annually as a permanent appropriations and the addition of new subject areas (Barlow, 1965: 187).

This legislation emphasized the nation's concern with the advancing stages of industrialization and with the effect of vocational education on the strength of the nation. "Absorption of vocational education into the public education curriculum was a natural product of the American goal of education for all children of all the people" (Barlow, 1965: 2). Mechanization is the best description for the impact of the Second World War. The population shifted from rural to urban areas. The number of working women increased. Mobility of families was apparent.

During the 1950's vocational education was not a top priority for the government. "In 1954, the abolition of federal aid to vocational education was even seriously recommended to the administration" (Evans, 1969: 9). Priority was given to the development of higher education to service the white collar prospects. In the early 1960's unemployment, the postwar baby-crop, and the demands of the minority groups for equal rights, prompted the reassessment of education in both academic and vocational areas. Education and training were recognized as solutions. Expansion of programs was urged in all subject matter areas including those of practical nature (Barlow, 1965: 11).

Too little was being done to prepare the student who did not receive a college education and/or the student who had artistic and creative, non-academic talents. "The time had arrived when all workers would need some kind of special training for a successful working life. Yet less than one-half of the non-college trained labor force had any formal training for their jobs" (Evans, 1969: 9).

The Vocational Education Act of 1963 allotted money for developing areas of vocational education and expanding student population to include secondary school students, post-secondary students, persons in the labor market, and handicapped people. Research, teacher education, and school construction were also funded. Vocational education became a more unified program with a National Advisory Committee and several state committees. Programs were adjusted to projected manpower needs and job opportunities (Evans, 1969: 16-17). The actual implementation of the Vocational Education Act of 1963 brought some disappointment. Programs, new and existing, did not progress as rapidly as hoped.

In 1968 several amendments were made to the 1963 Act. New funding formulae, residential vocational schools, and national and state level long range planning were established (Evans, 1969: 87-92). The purposes of vocational home economics education were evaluated. Occupational home economics was separated from consumer homemaking and

placed under comprehensive vocational education. Consumer homemaking teachers were directed to deal with the problems of the poor and the working-wife homemaker by concentrating on consumer education, nutrition, and other basic homemaking needs (Evans, 1969: 75, 101).

Purposes of Vocational Education

The principal purpose of vocational education, adopted in 1963 and restated in 1968, was to make accessible high quality vocational education programs to all persons in all communities (Evans, 1969: 86). Students in vocational education programs are given the opportunity to explore a field of work which interests them. The meaning of work and the attitudes for successful job performance are better understood as the students assume greater responsibility for their work. "Vocational Education has changed a lot since the days when girls were sent to typing classes while boys in greasy T-shirts crawled under the engine of a car". (Kolflat, 1975: 50). Three basic objectives for public school vocational education are: (1) meeting manpower needs of society, (2) increasing options available to each student, (3) serving as a motivating force to enhance all types of learning" (Evans, 1971: 2).

Vocational education is not just the development of skills, but a well balanced program for student development. Vocational education

programs attract people who are being stifled by the totally academic system. "Occupational education should add the diversity and practicality which our educational system lacks in its effort to educate all young people" (Nelson, 1967: 1). An effective vocational education program teams both academic training and occupational skills. This requires "a continuing interplay of ideas between vocational and academic staff, preventing either program from being evolved in isolation from the other" (Midjaas, 1975: 40).

The initial and continuing design of vocational education is to help in the preparation of students for the improvement of their home life and/or for employment. Vocational home economics deals with both areas, work and home, with the primary concern being to help people achieve a satisfying family life (Van Horn, 1964: 23). Simpson states that the purposes of vocational home economics are:

- (1) To prepare students for homemaking through the development of those understandings, abilities, and attitudes which contribute toward effectiveness in the homemaking role.
- (2) To prepare some students for employment in home economics-related occupations.
- (3) To provide a basis for professional preparation for the college-bound girl who plans a career in home economics or a related field (Simpson, 1964: 74).

Scope of Vocational Home Economics Programs

With the approval of the Vocational Education Act of 1963, home economics assumed responsibility for providing gainful employment

curricula. In 1968, the Vocational Education Amendments "reaffirmed the traditional purposes of home economics of improving home environments and the quality of family life" (Nelson, 1970: 3). Federal funds provide support for vocational home economics programs which encompass consumer homemaking and occupational training classes.

Trends in society dictate the subject matter for home economics offerings. Today, some of the important trends to be considered for consumer and occupational home economics are:

The population of the United States is increasing

The population is more mobile; each year many people move

Population patterns have changed; more elderly, more infants

Families are larger

Home ownership and cooperative apartment ownership have increased

More people are living in urban areas

School will be the social center for many high-school age boys and girls

More students are in the labor force

Young people are marrying earlier

More women are working, especially young mothers

Family roles are more complex and flexible

Family instability has increased; there are more broken homes

Families have changed from production to consumption of goods

Family income has gone up and living standards are higher

Economy has shifted from scarcity to abundance, with different spending patterns

Technology has produced new materials, new and better equipment and appliances

People are working fewer hours and have more leisure-- for destructive or constructive living (Vander, 1964: 15).

In respect to the current trends, consumer homemaking programs concentrate on helping "individuals and families improve home environments and the quality of personal and family life, including instruction in food and nutrition, child development, clothing, housing, family relationships, and management of resources with emphasis on selection, use and care of goods and services, budgeting and other consumer responsibilities" (State of Montana, January 1975: 152). Occupational training or home economics wage-earning programs deal with the preparation for gainful employment by using home economics skills and knowledge. Some of the occupational areas are food service, child care service, clothing services, and home and institutional services.

A food service program involves the "planning, preparing, and serving of food on a quantity basis, use and care of commercial equipment, safety and sanitation practices, purchasing, storing, and record keeping of supplies. Supervised laboratory and/or work experience provides skill development in the many aspects of food service. Advanced training includes additional experiences in the planning and serving of food, and in the managerial and supervisory aspects of food service" (Ohio State

Department of Education, 1970: 33). Cook, baker, lunch counter supervisor, pantry person, short order cook, dietary aide, food and appliance demonstrator, waitress, bus boy/girl, host or hostess would be employment possibilities.

A child care service program has "instruction that is based on a study of the development, care, and guidance of children, and management and maintenance of the child's environment as it relates to the tasks performed in the child care center. Supervised laboratory and/or work experiences provide skill development in the care and guidance of children. The advanced training program affords opportunities to develop managerial and supervisory skills for employment in various types of child care centers" (Ohio State Department of Education, 1970: 32). Job possibilities would be nursery school aide, recreation or playground attendant, child day care center worker, Head Start aide, kindergarten aide, teacher aide, or assistant supervisor in a day care center.

To initiate any occupational class, a study of the history, culture, traditions, economy of the area, educational needs of pupils, and the projected opportunities for their employment is necessary (U.S. Department of Education, 1965: 1). A good program must consider the labor-market information, basic education requirements, guidance and counseling opportunities, actual training, and placement possibilities. Federal and state labor laws and regulations for hours worked, age of

student, employment conditions, student safety and student wages must be enforced (State of Montana, F 1707, Rev. e, 1975: 1).

Facility Planning and Equipment Needs

Long range goals and projections are necessary for successful planning of facilities and equipment purchases. Educational programs, the need to accommodate change, and flexibility are important when developing a home economics department (Nelson, 1970: 28). Facilities should be adaptable to meet changes and expansion for present and future programs (U.S. Department of Health, Education, and Welfare, 1965: 1). Also, home economics facilities "need to provide opportunity to develop critical thinking...for creativity in thinking and doing.. (and) practice in decision making which will lead to realistic problem-solving" (Ehman, 1964: 28).

The literature related to facility planning is limited (Nelson, 1970: 28), however, some guidelines have been established. The following are some principles considered basic to facility planning:

1. The educational program is the basis for planning facilities.
2. Facilities should be planned to accommodate changes in the educational program.
3. The facilities should serve the needs of various groups in the community.
4. Facilities for the program can be extended through the use of community resources.
5. Facilities for home economics programs should be planned to reach not only the average, but also the gifted, the physically handicapped, the mentally retarded, and the culturally deprived.

6. Proximity, flexibility, and convenience of classrooms and work areas where teachers can cooperatively plan and produce materials should be provided.
7. Safe and healthful environments should be provided for all departmental participants.
8. Mobile versus permanently installed storage and equipment should be used to provide flexibility of space.
9. Accessible and convenient storage of mechanical teaching aids should be provided.
10. Movable partitions and portable furnishings and equipment can help in adjusting space requirements to meet specific needs.
11. Accessible and convenient outdoor space adds to the flexibility of the department particularly in the area of child development and family recreation (Wisconsin State Department of Education, 1973: 9).

Equipment planning follows similar rules. It should serve the student needs and be used in as many ways as possible. Use of casters, rollers, or glides will make movement of large equipment easier. Adjustable height of work surfaces and tables for the varying sizes of students should be considered. The use of equipment that folds or stacks is recommended. Tables with extensions or folding sides provide extra workspace when needed (Vander, 1964: 13). Adaptability and flexibility are most important when planning facilities and equipment.

CHAPTER III

PROCEDURES

The purpose of this study was to develop lists for the selection of equipment used in dual curricula classrooms, with special emphasis on food service and child care service. Chapter III describes the population used and how the sample was selected. It discusses the survey instrument and the procedures used in analyzing the data and the categories for the final listing of equipment.

Description of Population

The population used in the study was 105 junior and senior high instructors teaching both consumer homemaking and occupational training in the food service and child care service areas. Instructors were selected from the states of Montana, Nevada, North Dakota, South Dakota, Oregon, Wyoming, Washington, Utah, Idaho and Colorado. These names were obtained from state home economics education supervisors and selected teacher-trainers in the home economics education departments on university campuses (See Appendix A).

Selection of Sample

From the list of 105 names, seventy were chosen. The sampling method was to accept two names out of each three. Every third name was deleted. The others were asked to participate in the study. By this method, "the selection of one individual was in no relevant way tied to the selection of any other" (Guilford, 1965: 139). Because of postage and duplication costs, the size of the sample was restricted.

It was believed that the seventy instructors would be a representative sample and an adequate number for obtaining the desired information.

The instructors chosen from the list were sent a letter explaining the purpose of the survey and inviting participation in completing the survey instrument. An acceptance sheet was attached to the letter. This was returned with a yes or no answer (See Appendix B).

Procurement of Data

A questionnaire was used to collect information. The survey instrument would be sent through the mail to contact instructors in states similar to Montana. Each instructor would receive the same set of questions and could take time convenient to him/her to complete the instrument. Room for individual comments could be allowed. A survey instrument was sent to those instructors who were willing to participate. A follow-up letter encouraging participation was sent to the instructors who had not returned the survey instrument by the deadline date (See Appendix C).

Description of Survey Instrument

General background information was requested concerning types and sizes of classes, longevity of consumer homemaking and occupational training programs, and total enrollment of the school (See Appendix D, Page 82). This would give some idea of the number of students accommodated and offer some boundaries to the final lists of essential equipment. Readers could then adapt the listing to their own situation.

To determine the equipment needs the instrument was designed so that the equipment used in consumer homemaking food and child development areas, food service, and child care service classes could be identified. The equipment lists used were found in The Physical Learning Environment for Teaching Child Care Services, Clothing Services, Food Services, Health Services, Home Furnishing Services, Housekeeping Services and Management Services developed by the University of the State of New York, Albany (New York State Education Department, 1969: 6-29). (See Appendix D, Page 83-100). The lists of equipment were divided into two classifications, those in the child development section and those in the food section. Within these broad categories, the items were grouped into various work centers in which the equipment could be used (i.e. preparation center, serving center, outdoor play center). For further clarification the items were separated into groupings for large and small equipment.

For each item of equipment, the instructors were asked to indicate: (1) if the item were useful in teaching consumer homemaking and/or occupational training classes, (2) if the item were available for use, and (3) if the item were desired for the department.

Method of Analysis

The instrument collected information concerning whether items of equipment would be valuable in teaching various programs, as well as if the items were included on an inventory as being used, desired, or not necessary. To help in the interpretation of the data see Figure 1.

The data tables may be found in Appendix E, Pages 101 through 131 .

ITEM OF EQUIPMENT	PROGRAM CLASSIFICATION ¹				INVENTORY STATUS ⁵			
	Only Consumer Homemaking ²	Only Occupational Training ³	Both Consumer and Occupational ⁴	No Response	Use ⁶	Desired ⁷	Not Necessary ⁸	No Response

1. The program in which the equipment would be most useful
2. Only useful for Consumer Homemaking
3. Only useful in teaching Occupational Training
4. Useful in teaching a dual curricula
5. Availability of equipment and necessity in teaching a dual curricula
6. Available and used when teaching a dual curricula
7. Desired by the instructor for use in teaching a dual curricula and would be purchased at the first possibility
8. Not necessary in teaching a dual curricula

Figure 1

Definition of Heading Terminology

CHAPTER IV

Results and Discussion

The purpose of the study was to develop lists of equipment used in dual curricula classrooms with special emphasis on food service and child care service. A discussion of the characteristics of the sample, the resulting data of the child development and food equipment sections, and the final recommended listings are presented.

Characteristics of the Sample

State

Seventy instructors from Montana, Nevada, North Dakota, South Dakota, Oregon, Wyoming, Washington, Utah, Idaho and Colorado, who teach both consumer homemaking and occupational training in the food service and child care service areas, were asked to complete a survey instrument. Affirmative replies were received from fifty instructors. Seven were disqualified because they did not wish to participate, were ineligible as both consumer homemaking and occupational training classes were not offered, and/or their replies were received too late to be included. Thirteen did not reply to the participation request. It could be assumed they did not wish to participate or were ineligible.

Survey instruments were sent to the fifty instructors who agreed to participate. A follow-up letter encouraging participation was sent to instructors who had not returned the instrument by the deadline date. Thirty-six instruments were returned. Teachers in North Dakota and Oregon returned the greatest number of instruments (See Table I). None

could be identified as being returned from the instructors in Idaho, Nevada, and Washington. Two survey instruments had no method of identification.

TABLE I
Home Economics Instructor Participation By State

	Participation Requested	Agreed To Participate	Instrument Returned
Colorado	15	11	6
Idaho	1	1	0
Montana	8	6	3
Nevada	3	2	0
North Dakota	12	9	9
Oregon	12	10	9
South Dakota	5	3	1
Utah	7	5	4
Washington	5	1	0
Wyoming	2	2	2
Total	70	50	34*

* Total was 36 as the state from which two instruments were sent could not be identified.

Classes

To determine the type of school that participated in the study, background information was elicited from the instructors. It was reported that the class size varied greatly. Food Service classes ranged from five students in one class to 120 students in another class (See Table 2). The size of the Child Care Service classes ranged from nine to 180. Food Service, Child Care Services, Home Economics I were the classes most often offered. Seventh Grade Homemaking and HEO (Home Economics Occupations) were the courses offered least. Classes taught in addition to those listed in the survey instrument were clothing, food nutrition, consumer education, interior design, HERO (Home Economics Related Occupations), and HEO (Home Economics Occupations).

Instructors reporting longevity of the consumer homemaking and occupational training programs indicated occupational training was the newer program (See Figure 2). Sixty-one percent of the reporting schools have offered occupational training courses for one to four years, while 47 percent of those same schools have offered consumer homemaking courses for over 15 years. No instructor reported offering an occupational training program for over 15 years. The median offering for consumer homemaking programs was 10-14 years while the median for occupational training programs was 1-4 years.

The largest group of instructors, 81 percent, reported a registration

TABLE 2

Class Size and Number of Reported Classes

Home Economics Class	Class Size Range		Total Number of Classes Reported
	Low	High	
Seventh Grade Homemaking	20	500	3
Eighth Grade Homemaking	20	300	5
Home Economics I	8	175	24
Home Economics II	8	110	15
Home Economics III	3	65	9
Home Economics IV	8	50	10
Family Living	6	250	19
Bachelor Survival	12	150	13
Food Services	5	120	26
Child Care Services	9	180	25
Clothing	10	110	12
Food & Nutrition	40	75	2
Consumer Education	18	75	2
Interior Design	11	75	8
HERO (Home Economics Related Occupations)	8	60	5
HEO (Home Economics Occupations)	21	54	3

