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ABSTRACT

The 110 research reports, papers, and other references written primarily during 1966-69 were reviewed under these categories: (1) Consumer Education, (2) Disadvantaged, (3) Homemaking, (4) Teacher Education, and (5) Research Methodology. Reasons for the lack of consumer education research may be that the renewed emphasis has taken place in the past two years and this component is interwoven into various home economic subject matter areas so that it is not readily available. The review indicated that it is possible to develop and implement programs that benefit the disadvantaged, but many of the disadvantaged studies should be replicated to increase the validity of results and to make additional recommendations. Additional research needed in the homemaking program area includes the development of new methods of teaching, innovative instructional materials, evaluation techniques, model programs, the affective domain, and process of learning, while areas of teacher education needing further research include problems related to recruitment, counseling students, adaptation of modern technological devices, and ongoing research of programs, teachers, and materials. Related documents are available as ED 039 336 and ED 043 773. (SB)

Information

Series No. 33

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review and synthesis of research on

CONSUMER AND HOMEMAKING EDUCATION

ERIC

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and Technical Education

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REVIEW AND SYNTHESIS OF RESEARCH ON CONSUMER AND HOMEMAKING EDUCATION

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PREFACE

This *Review and Synthesis of Research on Consumer and Homemaking Education* is one of a series of "state of the art" papers in vocational and technical education and related fields. Legislation enacted during 1968 gave new focus and special emphasis to consumer and homemaking education. Much recent research has also been concerned with this important priority topic. This publication should assist in identifying substantive problems and methodological approaches for researchers and curriculum development specialists, as well as providing practitioners with a summary of research findings which have application to educational programs.

This review is intended to be an authoritative analysis of the literature in this field. Those who wish to examine primary sources of information should utilize the bibliography in this publication or the companion publication, *Bibliography of Research in Consumer and Homemaking Education,* which is available from The Center. Where ERIC document numbers and ERIC Document Reproduction Service (EDRS) prices are cited, the documents are available in microfiche and hard copy forms.

The profession is indebted to Dr. Lena Bailey for her scholarship in the preparation of this report. Recognition is also due Dr. F. June Clarke, State University College, Buffalo, New York; Dr. Elizabeth Monts, University of Wisconsin, Madison; and Dr. Anna M. Gorman, research and development specialist, The Center, for their critical review of the manuscript prior to its final revision and publication. J. David McCracken, information specialist at The Center, coordinated the publication's development.

Members of the profession are invited to suggest specific topics or problems for future reviews.

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INTRODUCTION

This report is a review and synthesis of research and other selected literature in consumer and homemaking education written primarily during the period of 1966-1969. The intent of this review is to provide baselines of research for graduate students and members of the home economics profession in university, iunior and senior high school, vocational and technical school, and continuing education programs.

Titles for the body of research studies and other selected references herein examined were obtained from the *Bibliography of Research on Consumer and Homemaking Education.*[1] This report may be viewed as a companion publication to the bibliography.

The bibliography was developed as an outcome of the planning for the National Conference on Consumer and Homemaking Education held in Columbus, Ohio, on June 2-5, 1970. It was first released to participants in the conference. The preparation and development of this publication was a result of the combined efforts of Dr. Anna M. Gorman, research and development specialist, and Dr. Joel H. Magisos, coordinator of information services. The compilation strategy and organization of the bibliography are described in detail in the aforementioned publication.

As careful a review as possible was made of all the references listed in the bibliography. Therefore, the presence or absence of any reference in this report is due to the selectivity of the reviewer. After each reference was read, its appropriateness for this review was determined. Following this decision, each reference which was included was analyzed, summarized, and included in a related group of studies as indicated in the table of contents.

All references reviewed for this publication, in either hard copy or microfiche, were assembled by Dr. Anna M. Gorman and her staff. This reviewer is indebted to her not only for this wonderful contribution but, also, for her concern and inspiration.

[1] Anna M. Gorman and Joel H. Magisos, *Bibliography of Research on Consumer and Homemaking Education.* (Columbus, Ohio: The Center for Vocational and Technical Education, June, 1970).

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REVIEW AND SYNTHESIS OF RESEARCH ON CONSUMER AND HOMEMAKING EDUCATION

CONSUMER EDUCATION

Historically, home economics as a profession in this country has been influenced by social, economic, and political forces in our society. Today, these forces continue to exert influence on the direction and purpose of home economics. Political influence may be readily observed as a result of the passage of the 1968 amendments to the Vocational Act of 1963. Part F—Consumer and Homemaking Education indicates that funds allotted to the states will be expanded for education programs which: 1) encourage home economics to give greater consideration to social and cultural conditions and needs, especially in economically depressed area; 2) encourage professional leadership; 3) prepare youths and adults for the role of homemaker, or contribute to the employability of such youths and adults in the dual role of homemaker and wage earner; 4) include consumer education programs; and 5) prepare persons to enter the work of the home.

The amendments clearly identify consumer education as one aspect of home economics. A definition of consumer and homemaking education which appeared in the Regulations for State Plan Programs provides further clarification of the consumer education position in home economics. It is defined as education designed to help families and individuals improve home environments and the quality of personal and family life, and includes instruction in foods and nutrition, child development, clothing, housing, family relations, and management of resources with emphasis on selection, use and care of goods and services, budgeting, and other consumer responsibilities.

In recent years consumer education has been a part of many home economics programs. It would be difficult to develop a sound program, especially at the secondary school level, without including consumer education concepts. Nevertheless, the 1968 amendments to the Vocational Act of 1963 gave further thrust to this aspect of home economics. Since renewed emphasis on consumer education only occurred in 1968, home economics research in this area is meager. Two studies dealing primarily with methods of teaching and reaching adults with consumer education information are included and eight related references have been reviewed. These particular references are valuable sources of information for those concerned with researching consumer education problems and concerns.

Adult Programs

Gromatsky (1968) presented a paper at the National Conference on Educational Opportunities for Mexican-Americans which included some of the results of the El Paso research project on consumer education for Mexican-Americans.

She indicated that the El Paso project developed out of concern for helping families solve problems related to consumer competence and improved family living. The project's primary purpose was to identify the most effective methods of reaching Mexican-American families with the content of extension education programs.

The area selected for study contained 1,700-1,800 families. For purposes of the study, the area was divided into subareas I and II. One of the first steps was to conduct a survey using a random sample of households in both areas. Women with bilingual competency were employed to conduct interviews with homemakers from the random sample. The results of the survey revealed that both areas I and II contained the same population and there were no significant differences in such characteristics as education and family size.

Neither the entire educational program as applied during the project nor the results of the study were described in detail in Gromatsky's paper, since the project was still in progress at the time of her presentation. However, some results were available from the intensive program on food for good health and from the home management component.

Methods by which the Mexican-American homemakers acquired knowledge about food for good health were somewhat varied. In area I, circular letters were the most effective method of reaching the homemakers. In area II, television reached more homemakers than any other method. The effectiveness of the circular letter increased as family income increased.

Forty aides selected from the limited income areas in which they were to work were trained to carry out the home management component of the project. The program provided information on sanitation, nutrition, food preparation, storage, housekeeping skills, home improvement, clothing, and family relations, as well as credit and budgeting. For the very low income families, teaching by aides while on home visits was an effective method of reaching the families and of providing needed assistance.

A similar study was conducted by Norris (1967). Both studies were concerned with ways of reaching and teaching disadvantaged adults. Norris sought to answer questions about the characteristics of homemakers who came to extension classes in consumer education; how the homemakers differ from those who did not attend such meetings; what they perceived as their source of information in homemaking practices; which methods appeared to have the greatest utility in meeting the consumer education needs of homemakers living in low income urban areas.

A 10 percent sample selected randomly from homemakers who attended extension classes in St. Louis city and in two of the seven areas of St. Louis county responded to a schedule of 121 questions. Interviewers asked questions based on teaching objectives determined by extension specialists and on subject matter presented by paid nonprofessional leader aides, teachers in classes, and by flyers and leaflets. (The interview schedule appears in the appendix of Norris's study.)

Statistical analysis of the data obtained revealed that slightly over half of the participants in the program were between the ages of 30 and 59. The median income was $3,590, but 29 percent had an annual income of less than $2,000. Eighty-two percent had not completed high school. There was little difference in the educational level of homemakers participating in the program and those who did not. It is interesting to note that homemakers acquiring subject matter knowledge and applying the information were usually those with nine-11 years of formal education and with incomes of less than $2,000. The home economist appears to have provided the greatest source of information. Flyers and leaflets rated third as a source of information for the participants.

Norris recommended that educational programs be developed for the low income urban homemaker who is under 40 years of age. Furthermore, it was suggested that the leadership abilities of the low income urban homemaker be put to use.

Educational Materials

Consumer Credit in Family Financial Management (1967) is a document containing the proceedings of a workshop supported, in part, by the American Home Economics Association. Approximately 200 members of the profession attended the workshop, conducted to increase understanding of the nature and scope of credit in the national economy and in the family unit; extend knowledge of the legal foundations of credit; explore the socio-psychological aspects of credit addiction; and identify the contributions of home economics in the area of credit through education, research, counseling, and legislation.

The report is composed of 28 presentations given by authorities in the area of family economics, research, banking, economics, law, legislative affairs, consumer education, financial counseling, extension service, consumer marketing, sociology, education, and others. The content of the document concentralizes on one concept of family financial management—credit. The authorities brought to light some questions which would make interesting and, perhaps, worthwhile research problem areas. Some of the questions were: "Do the different interest rates charged from various forms of credit, and at various places, bear any relationship to the cost of giving that credit, even if we include the expected bad debt loss?"; "How can we help students to understand and/or develop insights to understand the intricacies of loans, insurance, interests, annuities, and garnishments?"; "In what kind of marketplace, under what kinds of conditions, and with what kinds of consequences are consumer credit arrangements to be created?"; "As we move toward a checkless-cashless society and the use of a universal identification card, what are the competencies needed by those who teach and counsel individuals and families?" Cooperative research efforts between family economic and home economics education personnel would be needed if research is to find the answers to these questions.

An excellent source of help to those concerned with the development of a consumer education program at the secondary level is *Guidelines for Consumer Education* (1968). This bulletin was developed on the premise that consumer education is the development of the individual in the skills, concepts, and understandings required for everyday living to achieve, within the framework of his values, maximum utilization of and satisfaction from his resources.

A list of objectives, an outline of content, suggested activities for individuals and groups, and specific topics for discussion are provided for selected consumer education topics. These are: 1) general principles of consumer purchasing; 2) budgeting or managing money; 3) purchasing and maintaining automotive products and services; 4) using leisure time, money, and energy; 5) renting or owning a home; 6) insurance; 7) savings and investments; 8) consumer taxes; and 9) consumer rights and responsibilities. The topics are not all inclusive, however, those selected are relevant to the needs of the teen-age population of this country. Suggestions for implementation of the consumer education program and an excellent list of resource materials also are included. The publication is organized in such a way that it is easy to read and to use.

A consumer education guide for home economics teachers was the product of a conference at Clemson University (1968). The guide contains a scope and sequence chart illustrating ways in which consumer education concepts may be integrated into clothing, food and nutrition, health, safety and home nursing, personal and family relations, child care and development at the eighth through twelfth grade levels of instruction. Furthermore, objectives have been stated for each of the subject matter content areas at all five levels of instruction. Generalizations, learning experiences, teaching resources and suggested ways to evaluate pupil behavior are other helpful information included. A description of the kind of pupils for whom the content is intended is not included. It is assumed by this reviewer that it is for students from the middle socioeconomic level and for students who are of average or better academic ability.

Paolucci and Thal's booklet, *Youth and Money* (1964) provides the answers to questions such as—"How much do teen-agers spend?"; "How do they use money?"; "Where do they secure money?"; "How do they perceive the meaning of money?" In addition, a list of "youth needs" relative to the use of money is provided. This list could be used as a source of ideas for developing and stating behavioral objectives.

Several papers (all available in one document) on educating the teen-ager in human relations and management of resources were presented at the annual meeting of the American Home Economics Association in 1965. Of particular relevance to consumer education are the papers: "What We Know About Today's Teenager" by Melvin S. Heller, "The Teen-Age Consumer" by Irene G. Oppenheim, and "Youthful Consumers—Are They Educable?" by Anne Ulmer. Other presentations on various aspects of the teen-age market are included. This document is a valuable source of information for both educators and researchers.

Finally, an excellent resource for all educators is the report of the President's Committee on Consumer Interest. This report contains sources of reference materials on the role of the consumer, consumer behavior, agencies and organizations, money management, credit, debtor problems, and many other topics of concern to consumers.

Summary

Research in consumer education is conspicuously lacking in the field of home economics. It is important to be aware that one reason is that the renewed emphasis in this area has taken place in the past two years. Another reason may be that the consumer education component of many studies is interwoven into various subject matter areas within the field of home economics so that it is not readily visible.

Studies conducted by Gromatsky and Norris have been reviewed in this section. They dealt primarily with effective ways of reaching and teaching disadvantaged adults with extension service programs. Gromatsky's report indicated that the most effective methods of reaching disadvantaged Mexican-American families were circular letters, television, and nonprofessional aides. Norris revealed that the home economist and classes were the best methods of getting information to urban, low income families. Flyers and leaflets rated third as a source of information. In addition to the two research studies, related educational sources of information on consumer education were reviewed and presented in this section.

Many questions which have implication for curriculum development and for research emerged during the writing of this section. Some are: What are the consumer competencies of disadvantaged persons who are effective regardless of their disadvantagement?; Are home economics programs for youths and/or adults providing relevant consumer education information?; What kinds of consumer information are disadvantaged youths and adults willing to accept and use?; Will the participation of lay persons in the planning as well as implementation stages of consumer education programs make a difference in terms of changing participant behavior in an appropriate direction?; How can the home economist work with others in the community who are vitally concerned with disadvantaged youths and/or adults?

DISADVANTAGED

Several studies concerned with various aspects of disadvantaged youth and adults were available for review. Those reported here include two studies pertaining to educational programs for mentally retarded youth. Of particular importance is a study dealing with the training of non-skilled personnel to assist in the care and treatment of mentally retarded children. Another study surveyed existing occupational programs designed to meet the needs of slow learners. One study is related to the occupational preparation of school alienated youth or potential school dropouts, and one study dealt with changing attitudes of maladjusted students. Finally, six additional references dealing with various facets of disadvantagement were reviewed—three curriculum guides, two books, and two bulletins.

Special Programs for Mentally Retarded Youth

Max Eddy, *et al.* (1966) conducted a two-year study that involved 105 teen-agers of low mental ability in a unique experimental work study program. The study was designed to: develop a program of vocational instruction using the cooperative work-study methodology, test for effectiveness of the program as a means of training for and establishing youth in employment, and develop criteria for predicting the success of pupils in cooperative study and in employment.

The guidance counselors of freshmen and sophomore classes of three high schools collected the necessary data for selection of participants in the study. A selection committee then determined the cases for the research population. A random table was used to assign students to experimental or control groups. Parental permission was secured before students began participating in the work-study experiment.

The curriculum designed for the study placed emphasis on communication, health and safety, driver education, applied arithmetic, family living, (home arts class) and practical arts. Students attended class one-half day and worked on the job one-half day. The curriculum pattern for the experimental group included social studies, mathematics, and related class experience. In addition, the students worked one-half day in jobs as dishwashers, fry cooks, service department helpers, custodians, courtesy clerks and others. The control group pattern included social studies, mathematics, physical education, shop or other practical arts, and study hall. This group did not receive cooperative work experience nor other related instruction.

The results of this non-credit, non-diploma track of occupational education are very encouraging. The method of instruction used was an effective one in that teachers, coordinators and employers attested to the general improvement of the group. Earning money and financial independence were prime motivating factors. Special instructional materials were necessary in order to provide adequate related classroom instruction. Individual counseling on the part of the coordinator and special consideration from the employer-trainer was essential to student success. When a feasible program is provided, mentally retarded youth will continue in high school. The project served as a catalyst for additional improvement in the educational offerings for mentally retarded youth. In addition, it served as a model for other programs. This report contains an extensive bibliography of 76 listings. The appendix includes the teacher evaluation forms and other sample instructional information.

A second part of the aforementioned project as reported in a separate document by Richard C. Erickson (1966) was concerned with developing criteria for predicting success of retarded pupils in cooperative work-study and in employment. The problem of predicting success of mental retardates is a very complex one. Since the study was rather involved, only information that would be of value to educators and administrators was included in the report. The primary objectives as reported in Part II were to determine the nature of a series of selected predictor variables as they relate to the success of mentally retarded youth in vocational work experience programs and to identify effective combinations of predictor variables and use them in the development of predictive formulae.

The independent variables or predictors were age, sex, scholastic achievement, intelligence, fine and gross hand coordination, perceptual motor skills, observed behavior, and projected behavior. The dependent or criterion variable was work success. Data were collected for 15 predictor variables through a variety of tests. The tests included the WAIS intelligence scale, full scale, tapping scale, perceptual motor survey, and several others. Data were collected for the criterion variable, work success, by a measure of each subject's success as rated by four certified cooperative coordinators. All data were subjected to statistical analysis which revealed that the single most relevant predictor was the score on the objective checklist. Other predictors of lesser importance were the picture arrangement test, WAIS performance I.Q., Stanford arithmetic achievement test, and the steadiness test.

The researchers indicated that any of the five prediction formulae presented can be used but that the degree of accuracy in predicting the criterion will decrease as the number of variables included in the predictive battery become smaller. In addition, the authors stressed that additional research is needed to validate and refine the formulae to within a range of workable accuracy.

Groelle (1967) described a two-year pilot project carried out in three phases which is very similar to the Eddy and Erickson project. This particular project was designed for educable mentally retarded high school-age youth. The 150 senior students participating in the occupation and work experience program were from 17-19 years of age and the I.Q. ranged from 53-78.

During the first phase of the project, courses of study, instructional materials, and teaching procedures were developed. Home economics per se was not included in the course of study. However, some of the content identified in the plan and in the curriculum materials is related to home economic subject matter, particularly family relationships. Other content areas included were social science, natural science, mechanical arts, business, and the arts.

The establishment of a functional occupational work experience program in five high schools was carried out in the second phase of the study, and also classroom instruction using the materials developed during the first phase. In addition to classroom instruction, the students spent two 60 minute periods per day in work experience.

Some of the materials developed especially for use with the mentally retarded students included a series of progressively more complicated job application forms, job descriptions of work suitable for mentally retarded youth increasing in difficulty from the third to the fifth grade level, brief work-oriented study lessons using role playing, and an interest inventory written at a fourth grade level of reading ability. In addition, a commercially prepared bulletin on human relations was revised and rewritten to the fourth grade reading ability level.

An evaluation of the program and a follow-up study of graduates were completed during the third phase of the study. The evaluation revealed that of the 150 pupils in the program, 52 percent were placed in full-time employment, 32 percent were in training situations, and 15 percent were unemployed at the time of the follow-up study.

The Leighbody (1967) survey of existing multi-occupational programs of vocational education for slow learners disclosed that the programs were of an occupational work-experience design. The survey was conducted in New York and other selected states and included six high school programs for students with special needs. In some high schools, the programs included not only slow learning students but those who were dropouts or potential dropouts.

Survey data were secured by means of interviews of key personnel, through observation of the program in action, and through a study of official records. The results indicated that the programs included occupationally related instruction and activities in actual work experience to make school interesting to prevent the students from dropping out. Other reasons were to add to the general education of slow learners and to provide a basis for more specific vocational education. Only one program was found to be designed solely for job preparation and placement.

Programs For School Alienated Youth

An extensive study of training for school alienated youth, dropouts and potential dropouts, is reported in two documents (August 1968 and September 1968) from the Center of Vocational Arts in Norwalk, Connecticut. As of the date of publication of the documents, the Center of Vocational Arts had completed three years of providing occupational training for special students. The Center is a non-graded school where students are permitted to progress at their own rate as determined by individual ability and motivation. Emphasis has been placed on individualized instruction and on guidance. Students attend class three hours per day and spend four hours per day in part-time employment. Areas of training available to the students include automotive services, food services, health services, office services, landscaping and horticulture, maintenance and repair, manufacturing operations, and retailing services. Child care was included in the beginning but was discontinued because of low enrollment. The student body is composed of 15 to 21-year-olds. Seventy had dropped out of high school and over 200 were potential dropouts. By 1967-68, the total school enrollment had climbed to 286 students. Of this number, 91 students completed their studies during the academic year of 1967-68. Thirty-seven of these were awarded a high school diploma and 54 were awarded a vocational certificate.

Students' appraisal of the program revealed that 41 percent were very pleased, 43 percent were pleased, 15 percent not sure, and one percent disappointed. In addition to program evaluation, the students appraised their feelings and attitudes. Fifty percent said they felt like somebody as a result of attending the program. Seventy-six percent said they were happier persons. Seventy-five percent indicated they had gained confidence in their abilities and in themselves. Thirty-three percent felt they were less selfish about things. Fifty percent reported that they were better able to control their feelings. Sixty-six percent felt they had more fun mixing with people than before taking part in the Center program, and 49 percent indicated they could solve problems with less trouble. An evaluation of the entire program was conducted by the Office of Field Research and School Services, New York University. The results indicated that the program was successful in rebuilding academically school alienated youth. A complete report of the evaluation appears in a second document (September 1968) which is really an appendix to the first document released in August 1968. The appendix contains: 1) A Comparative Study of the Perception of the School by the Students, 2) How Students at The Center of Vocational Arts See Themselves, and 3) People Do Change: Case Study Reports on The Students.

Changing Attitudes of Maladjusted Students

Changing attitudes in an appropriate direction has been one of the traditional goals of education in this country. Changing the attitudes of maladjusted students to react more favorably to supervision was the primary goal of a study conducted by Stogdill and Bailey (1969). The researchers sought to change the students' attitudes toward supervision through motion picture presentation followed by free discussion sessions of 40 to 50 minutes in length.

Six motion pictures, each depicting a particular pattern of leadership behavior, were made for use during the study. The patterns of leadership or supervisory behavior illustrated were: 1) representation—the leader speaks and acts as a representative of the group, 2) influence with superiors—the leader gets along well with superiors and has influence with them, 3) structuring expectations—the leader lets the followers know what he expects of them and what they can expect of him, 4) tolerance of freedom—the leader tolerates and encourages initiative and freedom of action of the followers, 5) consideration—the leader looks out for the welfare of the followers and acts on their suggestions, and 6) productive emphasis—the leader pushes hard and persistently for productive output.

The students selected to participate in the study and to view the motion pictures were from a high school located in the business district of a highly industrialized city. There were 51 boys and 49 girls, some of whom had been evaluated by their teachers as maladjusted students who responded poorly to supervision. Other students were evaluated as well adjusted. The students were pretested and then divided into small groups of eight to 10 members. One-half of the students of each of the small groups were poorly adjusted; the others were well adjusted. The students were reevaluated approximately eight weeks after each of the small groups saw the motion pictures and had conducted discussion sessions about the supervisory behavior depicted in each of the films.

The poorly adjusted experimental group was rated significantly higher in adjustment to supervision after discussion of the motion pictures than before. No significant difference was obtained for the poorly adjusted control group that did not see the films. The results statistically were in favor of all experimental groups that saw and discussed the motion pictures with the exception of the well adjusted girls. On their second ratings, teachers tended to adjust them downward; however, the experimental groups lost leas than the control groups. The researchers recommended that motion pictures be used again both in training and in research.

An instrument used to determine any change in student attitudes toward different patterns of leadership behavior was *The Ideal Form of The Leader Behavior Descriptive Questioning—What The Ideal Leader Should Do*. This questionnaire includes five subscales: representation, structuring expectations, tolerance of freedom, consideration, and production emphasis. In addition to the questionnaire assessment, the students were rated by their teachers on adjustment to supervision. The teachers used The Behavior Descriptive Scale for this purpose. Both evaluation devices appear in the appendix of the report. The instruments have some unique characteristics and may be of value to researchers concerned with problems related to behavior change.

Preparation of Non-Skilled Personnel

The preparation of non-skilled personnel to assume some of the duties now undertaken by the regular classroom teacher is under consideration by some universities and by some educational administrators. This appears to be in the minds of leaders in fields other than education. According to a study conducted by the Retarded Infants Services, Inc. (1967), it is feasible to train non-skilled personnel to assist professional staff in the care and treatment of mentally retarded children. The report of the study included the procedure for recruitment, criteria for selection of trainees, characteristics of trainees, jobs the trainees were prepared to assume, and job placement.

Information about the 12-week training program was made available to potential trainees through newspapers, poverty and youth employment programs, guidance counselors, and the Retarded Infants Referral agencies. Enticements to persons to enter the program were in the form of a stipend and a symbolic status award. The organization of the class as a modified seminar also was considered motivation to enter the program.

Applicants were required to have the equivalent of an elementary education, be within an age range of 18 to 50, have some experience in working with children, possess motivation other than emotional involvement arising out of personal experience with the mentally retarded, and complete a medical examination. A social worker interviewed the applicants and made the final selection of trainees. Fifty-two individuals were selected to take part in the program. Of these, 50 were female, 31 were black, and 15 were Puerto Rican. Eighteen were married, 28 had never been married, one was a widow, and three were separated from their husbands or divorced. Sixty-three percent of the participants were high school graduates. The average number of years of formal education was 11.5. The average age was 28 and the average amount of family income was $122 per week.

The trainees were prepared to serve mentally retarded youth in the areas of homemaking and child care, nursing care and medicine, play activity, auxiliary maternal care, and speech therapy. Forty-five persons graduated from the program. Thirty-five were placed in positions by the project and 10 were not. Of the 45 graduates, 35 were employed in situations dealing with mental retardates or the handicapped. At the time of this study, the majority of the graduates were still in their original placement positions and approximately one-third had received one salary increment. All employers gave the employees positive evaluations.

Other information included in this report is a list of curriculum activities week by week. Forms, instruments, a graduation certificate, a bibliography of audiovisual aids, a list of cooperating agencies, and job descriptions of case aides, assistants to clinic nurse, pediatric aides, assistant teacher, and group work aide are also included.

Disadvantaged Rural Families

In an effort to identify effective methods to use in conducting an educational program to reach and teach low income young homemakers in rural areas, members of Alabama's Cooperative Extension Service developed an extensive long-range project. Priester (1968) reported that 14 nonprofessional program assistants were employed to conduct the program in five counties. These assistants were selected on the basis of their homemaking skills, their empathy toward low income young homemakers, their ability to communicate with them, and their willingness to accept supervision. It was necessary that each assistant be willing to establish an office in her home, have a telephone, and have an automobile.

Methods of teaching and reaching the young low income rural homemakers selected to be used throughout the duration of the project were: 1) working visits, 2) small informal group meetings, and 3) a newsletter published monthly. The working visits were made once each month by the program assistants. Each visit was made with a specific purpose in mind. The purpose of the visit was determined in light of the homemaker's economical, educational, and skill needs. The length of the visit might range anywhere from 20 minutes to three or four hours. While in the home, the assistant taught by telling and showing and, then, by having the homemaker repeat the process and/or skill. Each program assistant kept a log of each of the visits.

Some of the small informal group meetings were held monthly. Others were held biweekly or weekly. These meetings were attended by two or more low income homemakers. During these sessions, homemaking skills were taught or tours were made for the purpose of increasing family participation in community services and for purposes of consumer education.

The newsletter, *Katie Comes Calling* was published monthly and included how-to-do-it information. Many illustrations were used and it was written on a second to fourth grade reading ability level.

Six hundred eighty-six young families which included 3,276 members took part in the program during a three-year span of time. Family members were referred to the project by public health nurses, directors of county Offices of Economic Opportunity, rural ministers, directors of Donated Food and Food Stamp programs, welfare departments, school principals, attendance officers, and teachers.

The project has sought to: 1) provide learning experiences for low income young homemakers which would raise the aspirations of family members; help homemakers develop respect for themselves and their homemaking roles; improve health of family members; help them to become prepared to accept improved economic opportunities as they developed; help them become better parents and have a more satisfying home life; and increase their understanding of the community and help them utilize its facilities and services; 2) develop publications and other teaching tools which could be understood and used by the low socioeconomic level families; and 3) employ, train, and supervise nonprofessional assistants to conduct an educational program that would develop an increased level of living for low, socioeconomic level young families. This was an impressive list of objectives. All objectives were at least partially accomplished.

Some of the salient results reported by Priester include evidence which indicates that: 1) personalized learning experiences are essential if the disadvantaged families are to raise their level of living; 2) emphasis on the development of homemaking skills helps the mother to develop a kind of home life that encourages children to go to school and to grow out of the relief cycle; and 3) acquiring skills helps the young homemaker and family members to develop self-esteem, and to raise and renew their hopes and aspirations. All of the results of the project are equally impressive but they are too numerous to include in this review. A very fine contribution which this project makes to future research is through the recommendations. The researchers saw a need to: 1) identify methods and criteria for selecting program assistants, 2) compare the effects of part-time and full-time program assistants, 3) determine the feasibility of using men as well as women for program assistants, 4) compare the advantages and disadvantages of conducting a similar study with a limited welfare program as opposed to an educational program with no welfare program, 5) determine effective means of measuring change in social development of low income families, 6) determine the ultimate behavior changes that can be expected from deprived families, and 7) determine the need for easy-to-read publications.

Some of the preceding recommendations already have been investigated, at least in part, by other researchers. Criteria for selecting program assistants or nonprofessional aides were established as part of a feasibility study conducted by Retarded Infants Services Inc. (1967). The need for easy-to-read publications and their importance in reaching and teaching disadvantaged families was stressed in Gromatsky's report of a program for Mexican-Americans (1968).

A report by Fuller and Phipps (1968) brought together the impressive plans of project REDY which pursued another avenue of concern in relation to disadvantaged rural families. It consisted of two parts: first, a description and evaluation of a model vocationally-oriented education program and second, a description of the degree of upward social and occupational mobility which might be expected of disadvantaged families from rural areas. Project REDY (Rural Education-Disadvantaged Youth) was initiated by the University of Illinois in June 1965 and was scheduled to terminate in June 1970. Therefore, final results were not available at the time of this review.

The project was designed to study in depth a selected depressed rural area and to identify the anthropological, economic, psychological, and sociological conditions and trends that are characteristic of the area; to develop a model program; and to try out the program and evaluate its effectiveness. Another phase of the project was to explore the degree of upward social and occupational mobility which might be expected of these families.

Disadvantaged families were characterized as those with an annual income of less than $3,000. These families were concentrated primarily in 20 counties and numbered 59,303. From this population universe, experimental and control groups were selected for the study.

Although statistical results are not available at this time, the means by which the data has been collected was included in the Phipps and Fuller reports. Data has been gleaned from existing resources—schools, state employment agency, welfare agencies, cooperative extension service, farm and home administration, churches, law enforcement agencies, Office of

Economic Opportunity, and from several other agencies. Standardized instruments used were the Sims SCI Occupational Rating Scale, Minnesota Survey of Opinions, Wants and Satisfaction Scale, Your Leisure Time—Part I and II, Gordon's Occupational Check List, and the Community Solidarity Index. The appendix of the first part of the report contained a description of each of the preceding instruments. Furthermore the appendix contained the PERT plan for the project, the kinds of demographic and other data collected, and the activities carried out in the model program. Three units appear particularly interesting—Youth and Career Choice, Family Financial Management, and Improvement of Family Income.

In the second part of the report results were presented concerning the part of the project which dealt with the upward social and occupation mobility of the rural families. They were characterized primarily as middle, upper working, and working class families. In addition, the adults and youth wanted to and would work. However, they tended to choose lower status jobs because of local availability and social conditions. The researchers concluded that full development of rural depressed areas will be realized when business and education personnel join efforts in attacking the problems.

Another study which was concerned with reaching and teaching disadvantaged families was reported by Brown, *et al.* (1965). (Other studies of this nature were reported by Gromatsky, Norris, and Priester.) However, the method used to select the population for the study and the method of reaching these families with information about food and nutrition is somewhat different from previous studies reported herein. Low income families who were participants in the Food Stamp Program in the Wilkes-Barre area of Pennsylvania were the population for the program.

The method used to disseminate information to them was called a Penny Planner card. The Penny Planner was a 7½" x 3¼" card on which a recipe, nutrition information, and/or buying tips were printed. The cards were sent to the low income families on 12 different occasions. On two occasions the names of county home economists were included. The intent of this was that families might contact them for additional help and information. These cards were enclosed with the food coupon authorization mailed twice monthly, on the 1st and the 15th, by the Welfare Department. There were 3,112 families on the food stamp program.

The effectiveness of the project was evaluated by whether homemakers recalled receiving the cards; whether or not the food ideas and recipes printed on the card were used by the homemakers; the channels of communication used by the homemakers, their personal characteristics, and the socioeconomic status of the families; and if certain personal and social factors are associated with the use of information printed on the Penny Planner.

To collect the evaluative data, a seven percent sample was drawn from the list of food stamp recipients, and these families were interviewed by 27 staff members from Pennsylvania State University. The homemaker was the family member that was interviewed. All interviews were conducted in one day. Data were obtained from 145 families.

Interesting results were reported by Brown. However, a limited number are provided in this review. Ninety-one percent recognized the Penny Planner card, 69 percent had read them, 48 percent filed them, 11 percent gave them away, 19 percent threw them away. The type and size of family, age of the homemaker, her ability to read English, and the family income were determined to be associated significantly with the use made of the card. As judged by the interviewers, there was no significant relationship between the use made of the information on the Penny Planner and the amount of formal education, church membership, spare-time activities, neatness of the homemaker, cleanliness of the home, and conditions of the home and its furnishings.

The channels of communication from which the families received ideas about food or recipes were magazines, newspapers, advertisements (39 percent), own personal experiences (19 percent), from family members (17 percent), cookbook or old recipes (13 percent), from a store (seven percent), radio or television (six percent), food boxes and labels (four percent), and professional help (two percent). Newspapers and magazines were important channels of information for these families.

Some of the families indicated they would like to have more information on buying clothes, making or mending clothes (primarily childrens'), space to store things, borrowing money, and a few expressed an interest in landscaping. A few were concerned about buying information but indicated they didn't have the needed money. The overall findings of this study provided some concrete evidence of the needs and concerns of disadvantaged families. In addition, this report presents ideas for future research and/or programs. For example, a problem which some of the families indicated was a lack of communication with their neighbors. Perhaps the area of family and community relationship needs to be examined and programs designed to serve this need of families. Representatives from the low income families should be a part of the planning of programs. The studies reviewed have not indicated that individuals from low income groups have been included in the planning stages of programs or pilot projects.

Disadvantaged Urban Families

The Hunter, *et al.* (1967) report was a follow-up of an earlier study made with disadvantaged families in a city housing project. The objectives of the 1967 study were to determine the extent to which the selected families had been reached with the extension program; to ascertain the methods by which they had been reached; and to gather evidence of change in attitudes and practices related to homemaking and family living.

Data were gathered from randomly selected families by use of an interview schedule. The data revealed that, generally, the families changed little from the onset of the project in 1962 until the time of the follow-up study in 1964. This span of time was 17 months. However, there was evidence which indicated that the families were more aware of the opportunities available to them through extension programs. The proportion of families reached by extension varied greatly from one aspect of the program to another. The best method of reaching large numbers of families was with the under-the-door flyer. In addition, data revealed that individual or personal contact is of utmost importance in reaching these families. There was also some evidence which indicated improved knowledge and attitudes in such areas as the purchasing of food, nutrition, housekeeping, construction and alteration of clothing, child development, and installment buying. Persons who participated most actively in the program were the younger, better educated women from households of three or more persons.

The report is well organized, concise, and clear. The data has been analyzed thoroughly. It includes valuable demographic information on the disadvantaged urban families who participated in the study—average age, amount and source of income, and occupations of wage-earners. This kind of information is valuable for use in future research studies and programs such as: wage-earning programs for youth and adults, programs for senior citizens, or programs for alienated youth and/or the handicapped.

Another study reported by Hunter (1967) was again concerned with disadvantaged families of a large city housing project. However, this was a survey study and the large city was St. Louis rather than Boston. The purpose of this survey was to determine family characteristics, homemaking practices, and the effects of extension classes in food, nutrition, clothing, family economics, home management, Medicare, education, and recreation. The results of the survey were compared and contrasted to a previous survey made in 1964. Results showed that incomes were slightly higher but there was a lower level of living, more employed homemakers, higher proportion of women under the age of 30, and fewer with less than a fourth grade education.

The participants in homemaking classes were compared with nonparticipants. Participants had a higher proportion of two parent families; had annual incomes of $2,000 or more; had two full-time workers or one or two part-time workers; had larger families; were between the ages of 30 and 59; spent more for food but did not have a better diet; and were aware of Medicare, educational, and recreational facilities.

Various methods were utilized in reaching the families with program information. Flyers and leaflets provided information to a greater proportion of families in the random sample. Television was the second most effective method, newspapers third, and *The Housing Digest* fourth. This study somewhat supports the findings of Gromatsky and Norris (See Consumer Education section of this report) in terms of effective methods of reaching families with selected kinds of program information.

Educational Resources

Hillinger (1968) has written a text designed especially for the deaf, slow learners, or semiilliterate. The book was a product of a program and the development of special instructional materials which were used and tested in a vocational program at a state school for the deaf. The subject matter contained nontechnical information the students would need as employees in industry. The divisions of the book are units of study on: The Factory, A Good Worker, The Job, Shop Mathematics, Clothing for Women, and Clothing for Men. Each unit was subdivided into a series of lessons. For example, unit two contains six lessons on a good worker, work habits, attitude, honesty, grooming, and hygiene. Each lesson followed a workbook type format. The lesson began with a statement of objective. Then vocabulary words were listed. Illustrations, along with work descriptions, were used to get across the major lesson concept. The lesson concluded with an assignment which was two or three very short, simple questions.

Each page of the text was designed with large bold print, ample white space, clear and easy-to-understand words and pictures. There was sufficient space for students to write in comments or to answer questions. The book is an excellent model for the development of other instructional materials to use with students who have special needs.

Any teacher or researcher concerned with problems of the disadvantaged will find the book, *The Disadvantaged* by Fantini and Weinstein (1968) a most helpful source. In the first chapter the authors answer the question, "Who are the disadvantaged?" Each succeeding chapter makes a unique and worthwhile contribution to the overall concept of the text. The writers did a particularly fine job of identifying and describing the hidden curriculum which has a great influence upon the attitude and behavior of the disadvantaged. It was emphasized that the child's own hidden curriculum is far more oriented to reality than the school's methods and materials are prepared to encounter. The irrelevance of contemporary education is discussed extensively.

Other parts of the book dealt with strategies for change, implementing change, the teacher, a relevant curriculum, and contact classroom methods. The chapter devoted to the issue of a relevant curriculum is an excellent one. The authors proposed that our contemporary educational curriculum change from uniform to diversified, from symbolistic to experimental, from horizontal to vertical skill sequence, from remote to immediate, from what to why, from academic to participating, and from antiseptic to reality oriented. Finally, the authors proposed a list of decisions that need to be made when developing a model for a relevant curriculum. The detailed version of Fantini and Weinstein's model of a relevant curriculum provides excellent information for researchers who desire to experiment with a pilot program for disadvantaged youth and adults.

Three curriculum guides oriented to curriculum development for mentally retarded youth were selected for review. The first guide to be described was written by Meyen and Carr (1967); the second by Capello and Shapiro (1965); and, the third is a publication of the Rhode Island Warwick School District (1967).

In the very beginning of their publication, Meyen and Carr emphasized that the guide was intended to be used for reference rather than as a course of study. Topics on grooming and personality, home management, food and nutrition, clothing, and child care appear to be appropriate for educable mentally retarded youth. One of the most outstanding parts of the guide was the list of excellent instructional resources. Materials for duplication to be used as handouts have been included. Separate packets of materials for use by students may be prepared from the handouts. Another unique aspect of this guide was the sample lessons. Each separate unit included in the guide contained three or four sample lesson plans. They were excellent lessons which illustrate creative and innovative planning. In addition, sample evaluation forms have been developed for use with the plans.

This guide is an excellent reference for those who are just beginning to work with mentally retarded youth. Moreover, it is a sound source of information for those who may need references in planning a workshop, conference, and/or pilot program.

Capello and Shapiro designed a guide to help teachers prepare mentally retarded youth to find a job. The first section of the guide dealt with employment orientation such as finding and holding a job and protection for the worker. The second section was devoted to topics related to the working person—taxes, insurance, banking, budgeting, the family, reproduction, and growing up to manhood and womanhood. The outline of content for each of these topics was extensive. There was also an excellent list of learning experiences to present the content; however, this reviewer doubts the feasibility of using some of them with slow learners. As an example, one learning experience suggested required the learner to trace the history of insurance.

In addition to the preceding, the guide included related resource materials, ways to evaluate behavior change, and a 130-item bibliography which included films and filmstrips as well as pamphlets and books.

A job training and work experience program for educable mentally retardates in Grades 7 through 12 was presented in a guide published by the Warwick Public Schools of Rhode Island. It was organized into four parts—policies, curriculum, appendix, and bibliography. The curriculum basis for the primary, intermediate, junior high, and senior high school is described. Emphasis throughout all the levels of instruction was placed on the idea that work is part of everyday living.

Units of study offered at the senior level include home, school, and community living; basic health needs; nutritional needs; management of materials and money; and finding and applying for a job. Each of the units included an outline of content and a list of suggested learning experiences. The content outline was brief but the list of experiences was an extensive one. The list has been divided into approach, core, culminating, and evaluating activities.

A publication from the California State Department of Education on *Vocational Education for Persons with Special Needs* (1966) is a very fine source of information on research studies completed in the area of developing training programs for persons with special needs. This survey also included related studies currently underway and project proposals that have been funded by the U.S. Office of Education. Studies reported dealt with problems of aging, continuing education, culturally deprived, delinquency, minority racial groups, small schools, underachievers, and others.

Gertrude Noar (1967) is the author of a bulletin which, like the preceding, is a survey of current research on disadvantaged students. The description of the studies is concise and clear. Moreover, they are presented in light of their implications for teaching. Suggested teaching procedures and methods designed to aid this particular learner have been included. Special emphasis was given to the importance of teacher attitudes as related to success in classroom interaction.

Summary

Research studies on the problems of the disadvantaged as reviewed here are primarily work-study pilot programs for slow learners, and/or school alienated youth; experimental programs for reaching disadvantaged rural and urban families with home economics content; and follow-up studies on the effectiveness of such programs. One study on the vocational preparation of non-skilled personnel and another concerned with changing attitudes of maladjusted learners were included also.

The body of research considered herein represents many divergent concerns. It shows clearly that: 1) it is possible to develop and implement programs which help to prepare disadvantaged youth for work and for living an effective life; 2) both disadvantaged rural and urban families do benefit from programs that provide them with home economics offerings; 3) the preparation of paraprofessionals in home economics can be accomplished successfully; and 4) it is possible to change certain attitudes of maladjusted learners in an appropriate manner. Whether or not attitudinal change effected by experimentation can be sustained over a long span of time needs to be investigated further.

In addition to a few suggestions for research given earlier, certain other problems need study. In the area of program research it would be advantageous to study whether more participation by youth and adults in program planning would aid in developing programs on the basis of needs and interests. There is a need to help them realize that planning is an educational process which will help them evaluate problems and take steps toward the solution of problems. Somewhere along the educational pathway disadvantaged youth and adults must be helped to realize and accept the idea of life-long earning.

What determines the objectives, content, and learning experiences of experimental programs? Apart from generally recognized content of home economics programs, experiments could well be made in reaching the disadvantaged with content known not to have wide acceptance. Studies to appraise long-term influences of experimental work-study programs might result in better plans and expanded enrollment.

A comparative study in values, interests, or appreciations of youth of different ages and educational backgrounds would be significant to sound curriculum development. For example, in such a study or series of studies, attitudes toward non-skilled jobs could be determined. Inferentially, such studies would provide clues for patterns of curriculum offerings. Very little behavioral research concerned with attitudes, values, and interests of disadvantaged youth and adults has been conducted in consumer and homemaking education. This kind of research should be expanded not only by those in higher education but by the classroom teacher at the secondary and technical levels of instruction.

In conclusion, the methods and design of some of the studies should be replicated to increase the validity of results and to make additional recommendations necessary for change and improvement. Moreover, effective methods of gathering research data on individuals with varying kinds of disadvantagements need to be developed.

HOMEMAKING

There were several studies available which dealt directly with homemaking for youth and adults. Most studies were accounts of programs or descriptions of selected methods used in teaching. A few studies were concerned with factors that influence program development or curriculum design at the secondary level. Some of the studies may appear to have slight or tangential application, but certain of their methodological approaches to research or their findings when applied to home economics become significant. In addition to research presented herein, certain other selected references or curriculum materials have been included.

Adult Programs in Homemaking

Four reviews of studies related to adult education programs are included here. One study is an evaluation of a family service program developed and carried out by a state Cooperative Extension Service. The other three studies are concerned with adult education made available through reimbursed secondary school programs.

Alexander (September 1967 and February 1968) gave an account of a family service program conducted by the Cooperative Extension Service of Clinton County, New York. The evaluative study was designed to determine what effects the program had on the participants and to ascertain the socioeconomic characteristics of the participants as well as the family service aides who served as teachers in the program. Data were collected by interviews, tests of knowledge, reports of the aides, and records on file with concerned agencies. The results attest to the success of the program and provide valuable information for future programs. One of the most significant implications which came out of the study was that indigenous, nonprofessional women can be trained effectively to teach home economics subject matter to disadvantaged homemakers. Other studies which document the successful use of non-skilled personnel were those reported by Gromatsky (1968), Norris (1967), and Priester (1968). Reviews of these studies appear in the Consumer Education and the Disadvantaged sections.

One of the first steps in good program planning for youth and adults in homemaking is to determine the needs of the people and the resources available in the area where the program is to be offered. Bowyer's study (1963) was an excellent illustration of one procedure to follow in collecting and analyzing data needed in sound program planning. She used a relatively short two-page questionnaire to collect data. The questionnaire was sent to the mothers of pupils in a local junior and senior high school. From the data supplied by the mothers, she was able to determine whether or not they felt a need for additional home economics training; whether or not they had attended previous classes and would attend again; preference of location, time, and season of year for meeting; choice of subject matter for class; the number of mothers working; and so on. Bowyer was able to illustrate effectively how to collect and organize data for efficient utilization in program planning.

From time to time statewide evaluation of adult education programs in home economics is necessary for assessing strengths and weaknesses and for making projections of needs in terms of manpower, facilities, and finances. Allison (1961) researched the literature, made an analysis of the annual reports of vocational homemaking courses for adults, and conducted interviews with school administrators and homemaking teachers to determine trends and effectiveness of programs.

Allison's search revealed an increase in the number of high schools employing teachers to work with adults as well as youth and an increase in the number of schools employing teachers to work with adults on a full-time or a part-time basis. Nevertheless, the adult enrollment decreased during a ten-year period between 1948-49 to 1958-59. Moreover, the programs reached the middle-aged group of adults more effectively than the younger and/or senior adults.

She discovered that course offerings remained in the general areas of clothing, food, home improvement, family relations, home care of the sick, home management, child development, and family finance. Emphasis had been placed on clothing, food, and home improvement.

From interviews with administrators, Allison found that finances and personnel problems were the two primary factors affecting the expansion of adult programs. By contrast, interviews of homemaking teachers indicated that extra school responsibilities and lack of training in methods and techniques of working with adults were the primary factors influencing adult homemaking programs. Allison concluded that preservice and inservice education programs are not devoting enough time to helping teachers become aware of the current trends and practices in the field of adult education.

This report included excellent lists of recommendations to administrators, home economics teachers, and teacher educators.

Ferrante's (1962) study sought to compare and analyze the problems of adult education in reimbursed home economics programs as identified by the teachers of adults. She used two questionnaires as a means of gathering information needed to make a comparative analysis of the problems identified by both groups. The questionnaires were long and highly structured. The questionnaire sent to teachers was nine pages in length and sought responses to items dealing with personal data, preparing for class and teaching adults, problems, and others. Three of the first seven pages of the questionnaires sent to directors were the same as the one sent to teachers. Both questionnaires were pretested before use in the study to determine clarity of items, time, and appropriateness. Responses were obtained from 315 teachers (777 were sent to teachers) and from 216 directors (384 were sent out to directors). Data from 175 directors and 251 teachers were analyzed and reported in the study.

Findings indicated that directors differed from teachers in rating major problems and kind of help desired. Teacher subgroups differed significantly on the number and kinds of problems checked and help desired. When the 43 problems were analyzed, directors checked some of the same problems as teachers; however, the two groups differed considerably. Problems in rank order as identified by teachers were: 1) dropouts or student attrition, 2) limited time to make aids, 3) limited equipment available for class size, and 4) inability to meet the needs of large classes. The following problems listed in rank order were identified by directors: 1) student attrition, 2) limited time to make teaching aids, 3) limited funds to buy teaching aids, 4) no time to arrange aids, and 5) plan for wide range inability and experience.

Teachers felt that assistance was needed in keeping up-to-date on teaching procedure, keeping up-to-date on subject matter, knowing where to get current information, and knowing how best to teach subject matter. By comparison, the directors indicated that assistance was needed in understanding how adults learn best; keeping up-to-date on teaching procedure; gearing class to many ability levels; and knowing where to get current information. Other data gleaned and reported in Ferrante's study were on teacher certification, duties, experience, education, salaries, recruitment, and on aspects of adult programs such as subject matter taught, class loads, and scheduling.

One bit of interesting information stated by Ferrante indicated that from 1953 to 1960, enrollment in vocational home economics classes increased for adults in the United States. This was also true for the state of New York where her study was conducted. By contrast, Allison's study indicated that enrollment in vocational home economics courses for adults from 1949-1959 decreased 16 percent during the 10-year period. However, a close analysis of her study indicated that enrollment trends fluctuated from one year to another.

Secondary Programs

Two studies are reviewed in this section. The first is a descriptive study of family life education programs in Georgia Public Schools, and the second is a report of a family living-sex education project as implemented in 165 schools in New York.

Cross (1968) sought to accomplish four primary objectives through an investigation of family life programs. These were to determine the extent of family life programs, to ascertain the subject matter emphasized in the programs, to determine the kinds and preparation of teachers, and to determine why programs are not offered and the possibility of offering them in the future. She defined family life education as any course that gives major emphasis to the area of human development and the family whether it be considered home economics, family relations, sociology, or psychology. Home economics education was defined as any course that included all areas of home economics. The subject included not only human development and the family but also food and nutrition, housing, management and family economics, and textiles and clothing.

Data were collected by means of a questionnaire which was sent to all home economics teachers listed by the Vocational Division of the State

Department of Education. This included 522 schools. However, 199 or 38.12 percent of the schools were represented in the study.

The results indicated that there were at least 155 family life programs in Georgia during the academic year of 1966-67. Enrollment was greatest at the junior and senior grade levels. The program was usually of one year of two semesters duration. Most programs emphasized five major ideas—the individual in the family, children in the family, self-understanding, marriage as a way of life, and management of family resources. The majority of teachers of family life programs were home economics teachers. Sixty-four percent of the 199 teachers held master's degrees. Two-thirds had majored in home economics education, a few in some other area of home economics including family development. Forty-four percent had at least one graduate course in family and child development. Lack of teachers and scheduling problems were the reasons cited most often for not providing family life programs. However, many schools (about one-half) not offering family life programs indicated they would be offered in the future.

Cross recommended that family life programs be offered in the grades 7 and 8 as well as in grades 11 and 12, that research is needed to determine that most appropriate length (semester or year), that the family and child development units in the regular home economics classes should emphasize different concepts each year, that a survey list of available teachers should be made and distributed to school administration, and that teachers of family life programs should be expected to take graduate courses.

Lloyd and Wrightstone's (1968) family living-sex education study was conducted in New York state. The report was a description of the preparation provided for administrators and faculty involved, the methods and resources used in the implementation of the curriculum, and assessment of pupil and teacher attitudes toward the new program. The curriculum plan was integrated with social studies, science, health education, and guidance. In addition, it was offered as a separate course.

The bulk of their report consisted of an extensive review of the evaluation of the program. Evaluative information was collected from the teachers involved and from pupils in grades 6 through 12. A questionnaire required the participants to respond to multiple choice items on aspects of the program such as freedom of class discussions and self-understanding. Opinions generally were favorable, although some unfavorable attitudes were evident. Attitudinal changes in behavior were discovered among pupils of differing ages and sexes.

Although the report included four broad statements of objectives, there was little or no written evidence that the objectives were or were not accomplished. In addition, very little is written about the curriculum organization or the subject matter integrated into other courses or included in a course on family living and human sexuality.

Homemaking-Wage Earning

This part begins with a discussion of two studies related to the use of home economics knowledge and skills in securing gainful employment.

It concludes with a review of two studies about the management problems of young employed homemakers and the problem of single girls entering the world of work.

Roberts (1966) discovered that out of a total of 1640 former homemaking students, 777 indicated that some knowledge and skills gained in home economics were used in their occupations. Seventy-one percent were or had been employed. Most had been or were employed in clerical, sales and service occupations. Knowledge of home economics subject matter which had been acquired and used most included personal relations, grooming, clothing, food, home management, and etiquette.

The study was designed to answer four questions: 1) What kinds of gainful employment do homemaking students engage in and when do they accept employment? 2) What information and skills are needed for these gainful occupations? 3) To what extent is instruction in the information and skills needed for these gainful occupations included in home economics curricula? 4) To what extent may curriculum revisions be made to include units or parts of units containing knowledge and skills needed in gainful occupations? Answers to these questions were sought by collecting information through letters to employers of former homemaking students, through school records, from job descriptions and analysis, from qualified consultants, and from questionnaires completed by the former students.

Data were analyzed and then grouped into four divisions—people characteristics, educational background, gainful employment and skills acquired and used. The data revealed information that would be useful in developing a relevant homemaking program as well as a wage earning program. Perhaps one of the most significant pieces of information to emerge from the study is that present-day home economics courses may be enriched to include many competencies needed by young women who enter the world of work without reducing the value of the home economics content for homemakers. However, it was suggested that a need exists for special courses in some facets of home economics for those who desire to secure gainful employment upon graduation from high school.

The purpose of the Jordan and Loving (1966) study was twofold—1) to determine the needs for strengthening the homemaking program and 2) for planning programs to prepare young women for occupations using home economics knowledge and skills. This study was a 10-year follow-up of girls who had been enrolled in home economics in the 10th grade Virginia high schools during the academic year, 1954-55. Twenty thousand girls had been enrolled and of that number, 1,585 responded to a questionnaire, thereby providing data on their personal characteristics, attitudes, problems, and homemaking practices. In addition to the questionnaire, data were obtained from high school records.

These young women were characterized by early marriages (50 percent married between the ages of 15 and 19), early childbearing (50 percent became mothers before the age of 20), and early termination of formal education (11 percent did not graduate from high school).

The problems centered primarily in two areas—adjusting to new situations and adjusting to the role and responsibilities of being a homemaker. Over 90 percent felt that young women needed preparation in homemaking in addition to that provided in the parental home. Most of the young women possessed positive attitudes toward homemaking.

Almost all of the former students had been employed since high school—nearly 50 percent in clerical and sales occupations. This data parallels that of the Roberts study which reported that 71 percent of the former homemaking students who participated in the study were or had been employed and for the most part in clerical, sales, and service occupations.

The Jordon-Loving study revealed that students enrolled in home economics for the greatest number of years seemed to have a more positive attitude toward the homemaker's role, held higher regard for preparation for the vocation of homemaking, and expressed more interest in preparation for employment in home economics wage-earning programs.

This lengthy report contained much valuable information in tabular data form, student reactions and comments. It was concluded from the study that increased attention should be given to homemaking and wage earning education; more girls should be included in the program for a longer period of time, including post-high school professional training; provisions should be made for adult classes; and improvement should be made in homemaking courses.

It is interesting to compare a conclusion from the Jordon-Loving study with that of Roberts. The former researchers indicated that increased attention should be given to homemaking and wage earning courses. Roberts on the other hand, was more specific in his conclusions that home economics courses may be enriched to include many of the competencies needed by students who enter the world of work without reducing the value of the content for homemakers. In addition, he expressed a need for some special courses in certain areas of home economics. It appears evident that both studies support the need for providing training for gainful employment using home economics knowledge and skills.

The two studies described in the preceding paragraphs indicated that over half (71 percent and 75 percent respectively) of the former home economics students who were participants in the studies were working or had worked. Many were also homemakers. To assume a dual role of homemaker and wage earner results in a variety of problems. The Jordon-Loving study revealed that the most difficult homemaking problems of young married women were managing the income, adjusting to buying groceries for two, being responsible for making decisions, assuming responsibility in the absence of a husband, organizing meal preparation, and keeping an orderly house.

Additional research data on problems of young homemakers was provided by Hunsicker (1967) who sought to determine the time and money management problems of 250 employed homemakers under 25 years of age. The most frequent money management problems indicated were: 1) difficulty in setting aside money for emergencies, 2) anticipating future needs, and 3) staying within the budget. Some homemakers experienced difficulty in making decisions about which bargains are sound and avoiding impulse buying. The homemakers reported little difficulty in finding time for routine care of the home, and personal and family recreation. However, there was inadequate time for resting, ironing, sewing, clothing care, and seasonal home care.

Data for this study were collected by means of a questionnaire and were reported in five parts: 1) characteristics of the homemakers, 2) difficulties with time and money, 3) relationships between characteristics and difficulties, 4) summary of open-ended responses, and 5) results of six interviews. Data appears in tabular form.

By contrast and comparison to studies on problems of young married women, the Christman (1967) study focused on identifying the problems of single girls. She sought not only to identify their problems but to determine correlations between the kinds of problems and home town population, home economics education, living arrangements, and occupation.

The 491 participants responded to a questionnaire by ranking items on a nine-point scale. The number one on the scale represented "no difficulty" and nine represented "extreme difficulty." Responses were tabulated and data subjected to statistical computation. Those items with highest correlation were grouped into six clusters: employment, clothing, social adjustment, money, food management, and food preparation. Fifteen items did not correlate to any other beyond .30, and consequently they were not subjected to further statistical analysis. Cluster scores and size of home town, number of semesters of home economics completed, and place of residence were intercorrelated. Other problems cited include: 1) Nutrition created more of a problem than food preparation; 2) Making a decision about the job created more of a problem than keeping the job or getting along at work; 3) Interpersonal relationships on a social basis were of greater concern than those on the job; 4) As population of home town increased, employment and food management problems decreased; and 5) As semesters of home economics education completed increased, problems of clothing and food preparation decreased.

Single working girls living at home indicated that their greatest problem was parental acceptance. Girls living away from home expressed problems with budgeting, housing, housekeeping, and finding compatible roommates.

Evaluation of Programs

Various techniques and devices may be used to evaluate educational programs on either a nationwide, regional, state, or local basis. The evaluation may be administered by individuals outside of the educational realm or by appropriate groups within the system. One of the most effective kinds of evaluation is self-evaluation which is conducted by those involved in a local program. This section contains a review of procedures and criteria that may be used in self-evaluation. In addition, reviews of a nationwide evaluation study, the use of follow-up studies, and evaluation of instruction through observation of student behavior are included.

Reynolds, *et al.* (1967) have developed a manual that provides forms which may be used in self-evaluation of vocational-technical programs. The evaluative criteria included in the forms for each area are listed with a three-point rating scale. Space is provided for comments and/or explanatory notes. Evaluative criteria for home economics direct attention to the philosophy and objectives, administration and supervision, teachers, curriculum, instruction, facilities, laboratory management, and evaluation of programs. Procedures for the implementation of a self-evaluation program are also included in the manual. Importance was placed upon the involvement of each staff member in the process. Moreover, the significance of a steering committee and subcommittees was stressed. Suggested duties and responsibilities of the committees are provided.

One of the most familiar ways of evaluating the effectiveness of an educational program is by the use of a follow-up study. Many of the research reviews of programs in consumer education for the disadvantaged and in homemaking have been in the form of a follow-up study. Norris's study is an example of a follow-up study in consumer education. The third phase of a project for the disadvantaged as reported by Groelle is another example. Studies conducted by Allison and Jordon and Loving are other examples in home economics.

Sharp and Krasnegor (1966) have defined, identified, and described a follow-up study as a means of evaluating vocational programs now and in the future. They indicated that a follow-up study may be either descriptive or explanatory. Descriptive studies are usually placement reports, one-time descriptive studies, or trend and longitudinal studies. Explanatory studies are attempts to explain a situation, test a theory, or draw inferences and may be categorized as diagnostic or experimental. In addition to the preceding, the report discusses the follow-up study in more detail, indicating that the best study is a combination of trend and cohort.

The report pointed out the gaps in evaluation of vocational education programs. One of the most serious gaps found was the lack of follow-up information at the post-high school levels in technical institutes or junior colleges. A significant need in vocational follow-up studies is to determine what happens to the individual who has been trained. The researcher recommended a systematic nationwide evaluation of all vocational programs at all levels of training. Furthermore, there is a continuing need for small-scale studies of selected areas and programs.

A statewide follow-up study of vocational-technical education in Hawaii was reported by Edlin (1966). The study was conducted not only to describe the state of the various vocational-technical programs but to evaluate their effectiveness and to develop potential goals and ways of achieving such goals in the future. The results of the study do not look favorably upon vocational education. It was pointed out that the vocational courses in secondary schools generally lacked clarity in purposes or objectives and that the courses are looked upon by key personnel as programs for the non-college bound student. Moreover, the secondary programs were not preparing students for post-secondary programs, and remedial course work was necessary while carrying out occupational training. The report was very critical of home economics in particular. Some alternatives for change were offered. Among them was a challenge for curriculum change aimed at intellectual development.

As opposed to the use of follow-up studies as a means of evaluating effectiveness of programs, Yeager and Lindvall (1968) proposed a plan which placed emphasis upon the observation of pupils engaged in activities while the program is in operation. The researchers found that all the observational classroom activities in which pupils engage could be listed under five major categories: 1) independent work, 2) teacher-pupil activity, 3) noninstructional activity, 4) pupil-pupil activity, and 5) group activity. As the pupils in the study were observed, their behavior was recorded on a checklist which incorporated the five categories. An analysis of the checklist indicated that this method of program or instructional innovation evaluation contributes in three meaningful ways: 1) It helps to develop and/or refine the innovation; 2) It facilitates a detailed description of the innovation; and 3) It assists the implementation of the program or innovation in other educational settings.

In concluding this section on selecting criteria and techniques of program evaluation, it seems appropriate to call attention to a series of monographs in curriculum evaluation. Stake (1967), the coordinating editor, wrote the first monograph. Others were written by Tyler, Gagne, Scriven, and Ahmann. They focused on technology for evaluation, changing concepts of evaluation, curriculum research, the promotion of learning and methods of evaluation.

Curriculum Development

A report which was concerned with one method of curriculum design and three reviews of studies which dealt with determinants of curriculum are included here. Enrollment is a curriculum determinant which influences both the scope and sequence of program offerings. In effect, enrollment determines whether or not a program should continue to exist within the realm of offerings in an educational institution. Simpson, *et al.* (1963) conducted a study to determine the factors which influence enrollment. The researchers found that the quality of home economics programs, pressures to take other subjects, school schedules, patterns of offerings, junior high programs, and attitudes toward home economics had an influence on whether or not enrollment increased or decreased.

The quality of the home economics program appeared to have the most influence on enrollment. Quality of home economics programs, for this study, was determined by the learning acknowledged by the pupils, the kind of physical facilities available, arrangement and attractiveness of the department, the effectiveness of the home economics teacher, and whether or not the scope of offerings met a wide range of intellectual abilities.

Students from schools where the enrollment was increasing took home economics because: 1) It was of value now and would be helpful in the future; 2) It gave them an opportunity to learn things they needed to know; 3) It was good preparation for marriage; 4) It gave them an opportunity to develop leadership qualities; and 5) It was a challenging course. By contrast, students from schools where the enrollment was decreasing reported that they did not take home economics because: 1) Other courses were more interesting; 2) They could learn homemaking at home; 3) They were not interested in the material covered; 4) It was not a very challenging course; 5) They had too many outside activities; 6) The equipment and room were out-of-date; and 7) Classes were too crowded for the space. Both groups of students indicated they had received much help in grooming, clothing care, and food preparation. They indicated little help in finding out about community groups that work with children, making draperies and slip covers, and preparing and serving food from other countries.

When school principals were asked to indicate factors which most affected enrollment, they reported that teaching procedures and personal qualities of the teacher had the most influence. On the other hand, home economics teachers thought that the subject matter offered, the Future Homemakers of America organization, and attractiveness of facilities had the most impact on enrollment.

The researchers recommended that: a) a special study should be made and help provide for improving the quality of programs; and b) teachers should decrease the emphasis given to food, nutrition, clothing, and grooming, and increase the emphasis on the areas of housing and home furnishings, child development, and consumer education. The appendix to this report includes the three questionnaires and the interview schedule used in the study. Also, statistical tables and graphs are included.

In the wake of the Simpson, *et al.* study, it is appropriate to look at a study of female school dropouts as conducted by Prior (1964). The key concern of the study was to determine what young women need in order to succeed as wives and mothers and the extent to which in-school and out-of-school homemaking experiences may fulfill their needs.

An interview schedule was developed to secure data from 20 female dropouts who were married. The interview was both structured and open-ended. It was deemed the most appropriate means of collecting data because most of the respondents possessed low verbal ability, lacked interest in completing and returning a questionnaire, and would be more willing to answer personal questions verbally than to commit them to writing. In addition, the interviewer would have an opportunity to observe the interviewee's home and neighborhood conditions.

Findings which have a significant bearing on curriculum offering are: 1) Average age of females at time of marriage was 17.1 and the male 19.5; 2) Approximately 50 percent were pregnant prior to marriage; 3) Prenatal care was needed; 4) Median educational level achieved was less than ninth grade; and 5) Most of the families were not managing their finances successfully. It is very significant to note that their personal goals are very much like that of all young women—to own a home, educate their children, stay together, provide good moral training for children, be a good wife and mother, and for their husbands to have a better job.

The outstanding needs of this group of voung women were child care and development, sex education, meal pre. aration, and management of resources. One parallel which can be made from this study and the Simpson study is the need for greater emphasis in the area of child development and consumer education. Both studies point clearly to this need in curriculum change.

The researcher suggested that the female dropouts should be placed in programs to fulfill their needs. Professional home economics training shcould develop a better understanding of lower socioeconomic groups and cooperative extension should make more provisions for this group.

Enrollment and the reasons students drop out of school or out of home economics are two determinants of curriculum design. Perhaps one of the most significant influences on home economics programs is the attitudes and beliefs of administrative school personnel toward the program as part of the total school offerings. The Vossbrink (1966) study was a descriptive analysis of the interviews of administrators or counselors and first year teachers with regard to their feelings toward homemaking.

There was consistent agreement among superintendents, principals, and counselors that vocational and general home economics programs were desirable for grades 9 through 12. Mixed feelings were expressed about the students enrolled in the programs. The consensus of opinion appeared to be that home economics was good for girls but of less importance for boys. If boys and girls are to be in the program, they should be placed in classes which deal with personal development and/or family living. The present purposes of home economics were accepted as satisfactory. In addition, the community considered the program reasonably broad in scope, beyond the offerings of food and clothing.

Vossbrink indicated that programs should reach in many directions and serve various groups; that home economics must accept the challenge of change, and emphasis should be placed on research and experimentation.

The appendices of this document contained the interview schedule and the checklist survey of attitudes and practices used in the study. Researchers may find these examples helpful as well as the statistical tables and graphs.

The use of concepts as a basis for structuring programs is relatively new to the area of curriculum development. Pieretti (1965) reported the attempts of 175 home economists in six workshops to identify concepts basic to the field of home economics. From these workshops concepts were identified and grouped under the headings of human development and the family, home management and family economics, food and nutrition, textiles and clothing, and housing.

A sound conceptual framework in home economics should facilitate the development of programs for different levels of learning and for students from various socioeconomic strata. Pieretti's report provided a sample of how to put subject matter into a conceptual framework. The document also contained a discussion of the role of concepts in teaching, the use of concepts and generalizations in the teaching-learning process, and curriculum resource material fro conceptual framework and generalizations in home economics. In addition, the appendix contained an article by Asahel D. Woodruff, "Putting Subject Matter Into Conceptual Form." A speech by George W. Denemark, "The Curriculum Challenge of Our Times," also is included.

Research studies on the effectiveness of a program designed upon a conceptual framework do not appear to be available in the field of home economics. To compare and contrast a conceptually based curriculum to an experiential curriculum would make an interesting and worthwhile contribution to the area of research in curriculum development.

Methods of Teaching

Only one study which dealt solely with methods of teaching in home economics was available for review. Simpson, *et al.* (1965) conducted a pilot research project to evaluate the effectiveness of techniques used in teaching a four-week unit in child development in ninth grade students. Three hundred and fifteen students in 18 classes participated in the pilot program.

Two checklists were used to collect data on student interest and attitudes. Teachers kept a record of the reactions of the pupils toward the various experiences provided. Pre-post tests were given to the pupils to determine increase in knowledge and understanding of child development. However, no statistical treatment was applied to the test scores. None of the data gathering devices were included in the report.

The results showed that the use of a wide variety of teaching techniques contributed to pupil learning. The average number of different techniques used was 14. It was pointed out that problem solving techniques add greatly to teaching effectiveness. The teacher who was judged to have used the most effective techniques applied more of the steps in the problem solving process than the other teachers.

Educational Resources

Two curriculum guides, a study on the appraisal of curriculum materials, recommendations for home economics teacher from the White House Conference on Children and Youth, and three sources which contain reviews of research are described. It is hoped that such reviews will be helpful in program planning and implementation either for research purposes or for "the challenge of trying something new in teaching and learning."

A curriculum guide for use by home economics teachers in planning short couses for young men and women was developed by Arlington County (Virginia) schools (1967). The guide provided content ideas, learning experiences, and resources needed to plan three non-credit, short-term (9-15 lessons) courses in: 1) clothing for young men, 2) preparation for marriage, and 3) spending money wisely.

The guide was the result of an effort to meet individual needs and interests of students through group problem solving. Students enrolled in the short courses when they would ordinarily be in study hall. The classes required no outside preparation on the part of the student. The content for the classes was planned by a committee of home economics teachers, a principal, and a few selected students. Results of the strengths and weaknesses of the short-term courses tried out in Arlington County schools were not provided. The idea appeared to be an interesting and worthwhile endeavor. It may provide an opportunity to reach youth who for one reason or another have not enrolled in home economics. It may be a way to capture the dwindling interest of a young man or woman. The enticement of courses that are short, non-credit, and involve no outside preparation could eliminate pressures on learners and result in greater pupil interest and involvement. However, the success of any educational endeavor depends to a great extent upon the relevancy of content and the zest and enthusiasm of the teacher as well as experiences provided for pupil involvement.

Another curriculum guide which is different from the secondary homemaking guides ordinarily seen in home economics was devoted to homemaking in the elementary school (Sickler, 1964). It provided an extensive amount of background information on the elementary school age child, the role of the homemaking teacher in the elementary school, how homemaking can best fit into the school program, and facilities needed for carrying out a homemaking program. Illustrations were available on how homemaking may be correlated with the curriculum of grades 3 through 6 in art, arithmetic, language arts, music, science-health, and social studies. Sample lesson plans were provided which show how to integrate homemaking into other areas or disciplines.

Especially excellent was the list of references in health, science, and social studies. Topics from the texts which may be integrated successfully in home economics were listed. Areas of home economics selected to be integrated into elementary offerings included food, clothing, family life, and housing.

This curriculum guide contained approximately 65 pages of titles and sources of films, filmstrips, and other kinds of instructional materials appropriate for the elementary curriculum. In addition, suggested methods of evaluation were included. It could serve to stimulate ideas for planning a model for an elementary homemaking program which could be tried out and evaluated as a pilot project. Another idea for research which emerged while reading the guide was the need to develop and try out various kinds of evaluation devices which may be made available to the secondary homemaking teacher. Finally, the guide is an excellent reference to read in preparation for developing model experimental homemaking programs at the middle school and secondary levels. The concept of integrating home economics into other disciplines at these levels could be tried.

An abundance of curriculum materials is currently available to home economics teachers. Curriculum guides, resource units, and other materials are continuously being developed by local school committees, in workshops, in college classes, and by various other groups. The individuals who make up the groups are usually secondary teachers, members of state supervisory staffs, and/or members of college faculties along with specialists from particular disciplines or fields of knowledge. The guide, resource unit, or other curriculum material is then a product of experience and expertise in home economics. After completion, the materials usually become a source of reference for teachers and other professionals. Very rarely does the material become part of a research project. However, there are exceptions. For example, a three-year study reported by Horn (1966) revealed the results of an appraisal of the effectiveness of resource units in clothing and child development.

The resource units were developed by secondary home economics teachers while attending a workshop. These were then implemented by the teachers in local school programs. The purpose of the longitudinal research project was to evaluate the resource materials. The research procedure called for finding answers to the following questions: 1) Is there a relationship between test scores earned and intelligence quotient or Minnesota Scholastic Aptitude test score? 2) Do the test items indicate discrimination among upper and lower ability students? 3) Are differences evident among the mean test scores earned by students whose teachers: a) taught in a total or in a differentiated program, b) served or did not serve as supervising teachers, c) either completed or did not complete Curriculum 160A course, d) did or did not develop and use quality objectives and, e) made varying use of the resource units? 4) Is there a different pattern of resource unit test score means of those students whose teachers: a) taught in a total or differentiated program, b) served or did not serve as supervising teachers, c) either completed or did not complete the course, Curriculum 160A, and d) did or did not develop and use quality objectives?

Data were collected from randomly selected home economics teachers and their students by means of a survey instrument, unit tests, and score cards developed for use in rating objectives and block plans. Examples were provided in the appendix of the research report. The unit tests included excellent examples of various kinds of items—multiple choice, matching, completion, and problem situations.

The results of an analysis of the data revealed that the resource units provided a wide variety of suggestions for worthwhile student experiences. Many teachers were able to adapt the units in creative ways to meet the needs and interests of their students. However, it was noted that many teachers needed help in organizing classrooms for using the resource materials. The evaluative devices developed for the study, with a few changes, could be used by the teachers.

There is a need to continue to evaluate and appraise the effectiveness of the many and varied kinds of instructional materials. The whole area of commercially available home economics instructional materials provides an arena for research studies.

Many of the recommendations of the 1960 White House Conference on

Children and Youth have implications for home economics education. Simpson and Manning (1961) have written a publication which contained four chapters devoted to family problems which have an effect on school age youngsters. Topics discussed in each of the respective chapters were the role of the family today, education for family life, the family and problems of mobility, and the problems of nutrition. Each chapter presented one or more of the recommendations made at the White House Conference to solve family problems along with a discussion of the role of home economics in solving problems. Suggestions were given for implementation of the recommendations into home economics programs.

Annotated research summaries are always helpful sources of information for educators. Such summaries have been made available by the California Coordinating Unit for Occupational Research and Development, Sacramento (1968) and by the American Home Economics Association in two publications edited respectively by Mather (1967) and Purcell (1968). The former publication provides annotations on selected research studies in home economics from 1963 to 1968. Studies are presented from the areas of program development and teacher education, and in the subject areas of clothing and textiles, consumer and family economics, nutrition, child development and family relationships. These two documents presented a compilation of abstracts of master's and doctoral research in home economics education (Mather) and in family relations and child development (Purcell).

Summary

Descriptions of studies in homemaking as related to adult education, secondary programs, wage earning, program evaluation, curriculum development, methods of teaching, and curriculum resource materials have been presented in this section. Throughout the section there is a sprinkling of suggestions for research. In this summary additional ideas for further research in homemaking have been suggested.

An overview of the research in homemaking for adults indicates that the Cooperative Extension Service of states has been responsible for conducting many of the studies. The studies included accounts of experimental programs which have been designed to reach selected groups of people with program content. The current trend is on reaching disadvantaged families in both rural and urban settings. Alexander, Hunter, Priester, and Brown have provided accounts of this particular kind of research.

The studies in adult education have been comprehensive in design. Reports of the studies often have included demographic descriptions of the population included in the study, accounts of methods used in reaching the participants with home economics content and skills, results of the effects of the teaching on those participating in study groups or classes, and a description of the selection and training of program aides or nonskilled personnel in working with selected families.

Other agencies and individuals have conducted research in adult education. No particular trend in terms of kind of research conducted seems to emerge at this point. Some of the studies have been conducted by master's and doctoral students as well as bureaus of educational research. The studies included an analysis of problems in teaching adults, an appraisal of the trends and methodology in adult education, ways to obtain needed information about adults and how to organize the information for use in program development, and the development and evaluation of model vocationally-oriented programs.

An overall glance of the studies revealed that all of them are directly or indirectly concerned with program development. What then is needed in future research studies in home economics for adult education? First, we need to continue program research through studies concerned with the development of new methods of teaching, innovations in the development of instructional materials, techniques of evaluation, and the creation of new and different model programs. Second, we need studies which are not limited to cognitive and psychomotor learning, but rather, research which is devoted to the affective domain—interests, values, and appreciations. What attitudes influence motivation to learn and to continue a life-long process of learning? What is the relation of an individual's knowledge of selected home economics content to his feelings about it and ultimately his behavior? Studies in home economics could well be tried not only on individual attitudes but group attitudes as well. It is noted that the identification and measurement of attitudes and values is a more difficult and complex matter than the listing of individual and/or group opinions. Many shy away from research of this nature because of its abstractness and complexity. Finally, it would be well to restrict the scope of some program research so that it would be possible to focus sharply on one or two variables as opposed to numerous variables which tend to make difficult the clear conceptualization of a research design. Replication is needed of some of the studies to validate results and to provide additional recommendations for change and for other research.

In light of the body of research reviewed in this document as related to secondary homemaking programs, there are areas which need further investigation. The studies conducted dealt primarily with program development, implementation and/or evaluation. There is a need to carry on this kind of research continuously. But, in addition, research is needed in developing and evaluating methods of teaching such as problem solving, inquiry, discovery, simulation, and many others. It is important to study the effectiveness of method in disseminating content, but perhaps the greatest need is to study the efficacy of method in expediting learning. For example, a current trend in home economics is the use of curriculum "packages" at the junior and senior high school levels. The development, implementation, and evaluation of this method of disseminating content should be research.

Research is needed which is concerned with factors related to the process of learning. Motivation, perception, values, pressures, and self-concept are aspects of the area of human abilities for which research is noticeably lacking in home economics and vocational education.

Several studies were included in this report that dealt with the problems of establishing criteria and developing evaluation instruments, techniques, or methods for the evaluation of vocational programs. However, they were not home economics studies. Therefore, it is apparent that this is an area that provides opportunity for experimentation. The establishment of criteria that could be used in self-evaluation of local programs is well worth study, especially in home economics wage earning programs.

TEACHER EDUCATION

This section of the review and synthesis of research in consumer and homemaking education presents summaries of studies in teacher education. It is not intended to be an extensive survey. Rather, the body of research herein examined needs to be viewed in relation to its significance to the preparation of prospective teachers and teachers already in service.

Attitudes

One of the most impressive attitudinal studies in the field of home economics was conducted as a cooperative endeavor by Chadderdon, Coon, Ford, and Lehman (1966). This longitudinal project was undertaken to determine the attitudes of preservice and in-service teachers toward teaching, children, and groups different from themselves, and to discover early college experiences and experiences as juniors and seniors that might modify these attitudes. It involved representatives from six universities located in the north-central states.

The instruments used to collect data from freshmen, juniors, seniors, and teachers on the job were the Minnesota Teacher Attitude Inventory; Johnson Home Economics Interest Inventory; and an instrument designed especially for the study, The Teacher and the Community. The MTAI yielded information about the attitudes of teachers toward children; the Johnson Inventory indicated interests of those in 14 home economics professions; and The Teacher and the Community was used to determine attitudes of students and teachers toward families and groups different from their own.

Some general findings were: 1) Individuals with more accepting attitudes toward children felt their teaching loads were satisfactory, had recently enrolled in college credit courses, engaged in youth activities, taught in a vocational homemaking department, and recognized supervision as helpful; 2) Students' attitudes toward children were more favorable between freshman and senior years, but less favorable as first-year teachers; 3) Interest in teaching did not change from the freshman year until the first year of teaching; 4) Students probably were preparing to teach for practical reasons rather than because they felt a great desire to become teachers; 5) Interest in teaching during the first year was not found to be related to teaching load, space and facilities of their departments, or help given to them by the principal or home economics supervisor; and 6) Attitudes toward certain groups changed to some extent during the last years of the undergraduate preparation and during the first year of teaching, but the changes were not consistently in the direction of greater acceptance.

Scattered throughout the entire report were ideas for further research on attitudes and interests of prospective teachers and teachers on the job. Many recommendations were given for using the three data collecting devices and the further research which could help to refine and validate the findings of this 10-year study.

Motivation Factors

Motivation research is one of the most exciting and challenging areas for those who are concerned with determining the "why" of human behavior. However, it is a domain which some would not dare to enter because of feelings of exploitation which people may experience. If studies are designed carefully and conducted diplomatically these feelings can be avoided. Drabick (1965) appears to have accomplished this through a study designed to examine the relative influence of a number of potentially motivating factors upon a decision to enter vocational education.

Seventy-two undergraduate students in vocational education and 15 high school teachers randomly selected from the population of 1956-60 vocational education graduates at North Carolina State University took part in the study. They were interviewed using a schedule which required them to respond to three predisposing factors—influence of family, influence of school, influence of students, and two dimensional factors—altruism and self-interest, in relation to the degree to which these factors had influenced them to enter vocational education. Most undergraduate students were interviewed in groups. Teachers were interviewed where they were employed.

Analysis of the data indicated that for each of the two groups the predisposing variable of school was most important, the family of less importance but playing an important role, and the peer group of least importance.

The teachers appeared to be influenced more by altruism than the undergraduate students. Students disclosed that an opportunity to improve their position in life and to obtain prestige influenced them the most. For both teachers and students, the combination of school and altruism had the greatest influence on their decision to enter vocational education.

A review of this study stimulates one to ask the question, why do students enter home economics education? This question was answered to some degree by the research described in the foregoing section. It seems that additional research on factors motivating home economics teachers to enter the profession is needed. The information could be helpful in counseling prospective students and in planning individual programs of teacher preparation. Furthermore, researchers in home economics should be encouraged to investigate motivation to learn or levels of individual aspiration, or the desire to attain a certain level of performance on the job.

Predicting Success of Teachers

To determine the kinds of information needed and then to interpret it are crucial aspects of research devoted to predicting the behavior of people. Gilbert (1966), as part of a longitudinal study of homemaking teacher effectiveness, investigated the usefulness of clinical judgments to predict teacher success. More specifically, she sought to determine the number and type of judges needed to make reliable estimates.

Predictive data were collected by four instruments. The Guilford Zimmerman Temperment Survey and the Minnesota Counseling Inventory were used to obtain an estimate of personality traits. The Johnson Home Economics Interest Inventory was used to determine vocational interest and Lehman's, The Teacher and The Community to determine attitudes toward other persons and other groups. Two of the instruments were administered to prospective teachers either at the end of the freshman year or the beginning of the sophomore year. The other two were administered at or near the end of the sophomore year. Transfer students responded to the inventories soon after the transfer. Data collected by way of these instruments were supplemented with information concerning pre-college work experiences, an advisor's statement regarding strengths and limitations of the student, and the student's statement of motivation to teach.

Ten judges, two of whom were clinical psychologists, five guidance counselors, and three members of a home economics education department, analyzed the predictive data and made estimates for 80 subjects. Each judge analyzed 16 randomly assigned cases, providing two evaluations per case. An 11-point scale was used to determine the certainty of their estimations.

The judges were required to base their estimates on the probability of the student being successful in a one teacher department in a high school with enrollment of less than 400, located in a small town in Iowa with a population of 1,200 to 1,700, with few families from the lower socioeconomic level. A second estimate was made relative to success in a large, urban high school.

Three criteria were established to determine teacher success: 1) pupil gain in ability to apply generalizations, 2) pupil-teacher rapport, and 3) teacher adjustment to school and community. Pupil gain in ability to apply generalizations was determined by two forms of achievement tests. (The achievement tests were developed by the project leader.) Teacher adjustment to the school and community was ascertained by the school administrator and recorded on a special form developed for that purpose.

Statistical analysis of the data revealed significant differences among judges, subjects, and measures. Correlation of judges' estimates and composite success scores was not feasible. The report cites various reasons for the differences in the judges' estimates.

The report included sample items from each of the data collecting devices along with the rating sheet used by the judges in making estimates.

A study by Eddy, *et al.*, described in the section devoted to research on the disadvantaged, reported efforts to develop criteria for predicting the success of disadvantaged students in cooperative study and in employment. Again, as in the above study, the problem of predicting success was found to be a complex one. Research in this area should be continued. Various kinds of research designs that require new and innovative methods of collecting data and/or interpreting data should be tried by home economics researchers.

Preparation of Teachers for Occupational Programs

Five reports are presented here which are accounts of efforts to prepare teachers at the in-service level for occupational programs in home economics. A sixth report proposed a method for developing common curricula in teacher preparation for occupational education.

A two-part document describes a 1966 University of Georgia institute for home economics teachers on initiating, developing, and evaluating programs at the post-high school level to prepare food service supervisors and assistants to directors of child care services. Those attending the institute were selected teachers, supervisors, and teacher educators from seven southern states. Criteria used in selecting the participants are included in the report.

The institute objectives were: 1) become acquainted with procedures for initiating occupational education programs, 2) gain up-to-date knowledge about child care services and food services, 3) develop skill in planning programs, 4) develop resource material and instructional aids, and 5) become acquainted with procedures for evaluating occupational programs and developing evaluation devices. The document describes procedures, experiences, and materials used to accomplish these objectives. It is a valuable source of information for potential teachers of occupational programs, as well as state supervisors and teacher educators.

Dales and Buis (1968) described an institute that was conducted at Florida State University and involved 40 participants representing 34 states. The purposes of the institute were to provide help for persons responsible for curriculum in the child development area at the post-high school level, to help them make use of a recent resource guide, and to follow through on participants to evaluate the effectiveness of the training.

The report included a very detailed schedule of events and activities of the institute. Results of the training and a sample career pamphlet were also provided in the document.

Detro (1967) described a three-week workshop designed to prepare home economists for leadership in training adults and older youth for homemaker services. Teachers were provided with an opportunity to develop methods and a curriculum for teaching the necessary courses. The report includes topics considered in lectures, reports, and discussions of research findings. In addition, the results of a follow-up evaluation of workshop participants is provided.

Gorman (1966), in a skillfully organized report, has described an instructional program for teachers in the occupational areas of clothing, child development, and foods. The program was designed to provide basic knowledge, abilities, and attitudes considered essential for teachers of occupational classes. Moreover, instruction was provided on job analysis, course outline development, and program implementation. Learnings in field studies at the local level were a part of the instructional program plan. A final two-day session provided participants with an opportunity to evaluate both the instructional program and the field studies component.

The publication included an extensive appendix which contained a copy of a checklist device used as an evaluation at the beginning, middle, and end of the institute.

Another institute for home economics teacher educators on preparing teachers for occupational programs was recorded in a publication written by Hill (1968). The emphasis of this institute was somewhat different from the institute described in the preceding paragraphs, and was devoted to: 1) identifying and examining existing philosophies of vocational education affecting teacher education in home economics, 2) identifying the qualifications of teachers needed in home economics occupational programs, 3) developing plans for flexible and adaptable programs for preparing present and prospective teachers, and 4) developing guidelines for evaluating teacher effectiveness.

This publication presented a variety of excellent plans and proposals—a plan for an in-service conference of home economics teachers, guidance personnel, and administrators on occupational programs for high school; a proposal for providing coordinated employment experiences for home economics teachers; a proposal for a workshop on understanding characteristics and needs of educationally, emotionally, socially, and economically impoverished youth and adults. Approximately 14 plans and proposals are presented in the appendix.

One more report on teacher preparation for occupational education is worth noting because it is concerned with a program unlike any of the others presented. Courtney (1968) has proposed a conceptual basis for developing common curricula in teacher preparation programs for occupational education. To provide background for his proposed research model, he cites four approaches that illustrate the diverse opinions held by educators regarding the way teachers should be prepared. These include the perceptual, the roles, the competency, and the conceptual viewpoints. Following this discussion, a rationale was presented for a research model using the cluster concept approach. The objectives for the research model would be: 1) to determine the content of professional education needs for teachers of vocational subjects, 2) to determine the competency levels required, and 3) to extract the common core for professional education needs and training elements being studied to develop terminally a list of common professional education needs for teachers of vocational subjects.

A general design was presented for the proposed research model that included: 1) a population of vocational teachers, 2) an analysis of commonalities among vocational training programs by a factor analysis treatment, and 3) a statistical treatment of the data by the analysis of variance.

As can be readily ascertained, the accounts of programs to prepare teachers for occupational programs in home economics indicate that preparation has taken place at the in-service level and in institutes and workshops. Furthermore, each program has followed a slightly different pattern. These differences can serve as a catalyst to stimulate ideas for other kinds of teacher education programs.

There is a need to investigate new and innovative methods of teacher preparation at the preservice level. The cluster concept as proposed by

Courtney is an example. Research is needed to answer many questions. What are the courses needed? What are the most effective and efficient methods to use in teacher preparation? Is simulation a possibility? What are the most appropriate experiences and activities? Is field experience a requirement, and if so, what kind? Should a special methods course be required? If so, what should be included? In the preparation of prospective teachers of occupational programs there are problems related to recruitment and the counseling of students. These, too, provide research opportunities.

Preparation of Teachers for Consumer Education

The report summarized here is about the in-service preparation of teacher educators rather than the preparation of secondary teachers.

The staffs of home economics and business education at Michigan State University (Paolucci, *et al.* 1968) combined efforts to conduct an institute in consumer education. The institute was planned to provide in-service education for professional personnel in vocational education who will work with consumer education programs for the disadvantaged. State supervisors, local supervisors, and teacher educators in home economics, business education, and distributive education were sent flyers describing the institute. One hundred seventeen applied; 50 were selected to participate. Selection was based upon past leadership, potential for program influence, and geographic area.

The two-week institute placed emphasis upon identifying and reaching low income adults in rural and urban areas; social forces in consumer education for the low income adult; creating and coordinating program support; preparation of work personnel; and instructional methods, materials, and media.

A report of this institute contained a day-by-day account of the activities and experiences provided for the participants. In addition, copies of papers presented by guest speakers have been included.

Preparation of Teachers of the Disadvantaged

East and Boleratz (1968) conducted a research study to evaluate the feasibility of providing experiences for increasing prospective teachers' awareness of working class patterns of life and work. To have a clear concept of the research procedure, it is necessary to identify the preliminary steps. These were to consult about the locale for the project, contact social and employment agencies, set up a time schedule, recruit participants, and prepare instructional materials.

Thirteen college sophomores and juniors participated in the study. They were required to live with low income families in rural or urban settings for 10 weeks. During that time they assumed the role of an older sister or daughter. Each participant paid room and board, followed the rules of the household, worked eight hours a day, and shared her free time with the family. The student was expected to live on the money earned from her job. The jobs were unskilled ones in cafeterias, restaurants, assembly lines, and drugstores.

Before the field experience, student participants attended a pre-seminar. During the seminar there was a general discussion of the families and the jobs. Mechanical details of rules and deadlines were explained. The counselor's role and the student's role as a member of the family were identified. Instructional materials were studied and discussed. Reading assignments were made and pretests administered.

Following the living experience, the participants were required to attend 15 hours in post-seminars for post-testing and discussions of the living experience, reference materials, attainment of personal goals, a summary report, and changes or additions in the experience.

Because of the small number of participants in the study, it was not possible to establish an experimental situation. However, it was concluded that it is feasible to provide such experiences for prospective teachers. Moreover, researchers recommended that experiences should be provided that will help give students in-depth relationships with people who are different from themselves. Recruitment of volunteers for these experiences is likely to be a major problem. Therefore, the researchers recommended an ongoing program to educate both parents and home economics education students about the needs of present day teachers.

The appendix included details about: 1) the preliminary steps undertaken, 2) the instructional materials, 3) pre- and post-seminars, 4) data gathering devices, and 5) many other aspects of the experiment. This study was an effort to help provide educational experiences that would help provide prospective teachers with better understanding of disadvantaged families.

Two studies have been reported that deal with preparation of teachers already on the job to teach the disadvantaged. One of the studies described an interdisciplinary approach to preparing home economics leaders for emerging programs serving disadvantaged youth and adults (University of Missouri, 1967). The project was conducted in two phases.

The first phase of the project was undertaken to identify the roles carried out and the roles expected of professional leaders in home economics programs serving socioeconomically handicapped persons. Data on the professional leader's role were secured by the Q-sort method. Respondents were given statement cards and asked to arrange the cards on a "most agree with" or "disagree with" basis according to two frames of reference—the leader's actual role and the ideal role. Factor analysis was applied to the data, but the results were not included in the report.

The objective of the second phase was to plan and try out an interdisciplinary pilot program to supplement the background of professional home economics educators working in a program for socioeconomically handicapped persons.

Thirty educators participated in an eight-week program held on the campus of the University of Missouri. They studied the economic, cultural, and environmental backgrounds of the disadvantaged; their special needs, interests and concerns; and goals they can be expected to reach. In addition methods, materials, and procedures to follow in developing programs were examined and discussed. A follow-up study revealed that the educators were satisfied with the training they had received. Questionnaires, evaluation devices, plans of action, and some selected cases of action programs were also included in the report of the pilot program.

Another study concerned with teaching teachers to teach the disadvantaged has been reported by Levan (1968). This study was evaluative in purpose, and examined three questions: 1) What changes in semantics--differential meaning—accompany Attitude Change Title I training? 2) What differences in semantics—differential meaning—exist between teachers who have already experienced Title I training and teachers who have never undergone Title I training? 3) What relationships exist between various personality characteristics and changes in attitudes which accompany Title I training?

The population for the study consisted of teachers of the disadvantaged in Arizona, California, Nevada, and New Mexico who had volunteered for Title I training during the 1966-67 school year. Three adjunct populations were teachers who had volunteered for Title I training during 1965-66 school year, instructional leaders of 1966-67 in-service projects, and school district consultants who had training during the 1966-67 school year.

The instruments used to collect the data necessary to answer the three questions included a semantic-differential device which had been structured to measure the evaluation, potency, and activity dimension of meaning. Other instruments used were one projective test and four non-projective tests. Statistical analysis consisted of t-tests and an F-test.

The participants who had undergone specialized training were found to have more favorable evaluation of all concepts as a whole than those who had been exposed to generalized training. Consultants who had undergone Title I training did not improve their evaluative or activity rating. Instructional leaders made attitudinal changes toward the learner and the curriculum. Teachers who participated in Title I training in 1965-66 judged the concepts of service training and enrichment programs more favorably.

Teachers above the mean in ego strength tended to be above the mean in evaluative change. Subjects who were emotionally stable, calmer, and faced reality showed more change. Both verbal ability and quantitative ability were related to changes in evaluation. (An extensive bibliography of 181 items is included in the final report of the project.)

The three studies presented here offer three very different kinds of approaches to improving the preparation of teachers of the disadvantaged at the preservice and in-service levels. Other research efforts in this area might include the possibility of providing experiences with the disadvantaged through vicarious methods such as video tape or motion pictures. Perhaps field experiences early in the preparation of teachers that require students to teach and serve the disadvantaged in schools, housing projects, and/or homes for senior citizens could be incorporated into a teacher education program.

Evaluation of Teacher Education

The studies presented here deal with the evaluation of vocational teacher education programs and a state vocational education program. One approach to program evaluation has been to use an experimental design that places the program as the independent variable to which students have been exposed, and whatever growth or change is observed in students as the dependent variable. The following studies represent three approaches to program evaluation.

As reported by Prull and Very (1968), 117 vocational education graduates from four institutions in Rhode Island were surveyed to determine their opinions about their college preparation. Their opinions were obtained by a 30-item attitude and satisfaction scale. Responses from 66 recent graduates indicated that: 1) State needs are being fulfilled in vocational business education with the exception of lack of training in distributive education; 2) Agricultural education provides students with the necessary knowledge and skills in production agriculture, but additional emphasis is needed in nonfarm businesses, conservation, and food processing; 3) Trade and industrial teacher education has not maintained pace with the developments in industry and technology; 4) Home economics educates a number of well prepared teachers, but an increased demand for them might require an expansion of the program; and 5) Actual practical experience in a teacher's occupational area would help him to be a better teacher.

Kohrman and Trimpe (1963) have provided a report of the procedure used to evaluate vocational teacher education programs in Michigan. Each university and college approved by the State Board of Control for the preparation of vocational education teachers was asked to appoint a member to a special task force which would have the responsibility of the evaluation of vocational teacher education programs. In addition, a committee in each vocational service area was responsible for writing sections of the evaluation report on the service areas. Each of the five sections followed about the same format: 1) types of students enrolled in the program, 2) a description of the undergraduate program, 3) placement of teachers, 4) graduate degree program and professional improvement program, 5) supply and demand of teachers, 6) opinions of graduates, and 7) conclusions and recommendations.

It was concluded that vocational teacher education generally was meeting the needs of local communities, but follow-up services need to be developed and the research program expanded.

Borosage, *et al.* (1963) set forth the accomplishments of the Michigan vocational education evaluation project. The four-year study was conducted to determine the strengths and weaknesses of the program of vocational education and to provide information that would give direction for future program development.

This study is an example of a longitudinal evaluative program for vocational education. Researchers in home economics might find the section on the evaluation of home economics teacher education programs a fruitful source of information.

Patterns of Student Teaching

Student teaching has been traditionally a part of the preparation of prospective students. Throughout its existence many different patterns of organizing this experience have been tried.

Connor and Smith (1967) have experimented with an apprentice program known as the 2X2. This pattern involves placing a student teacher in a program for one semester in two different schools of contrasting socioeconomic levels, 10 weeks in each school. While the student teacher is in one school, he will observe and teach two weeks in different instructional levels. During the semester or 20 weeks of student teaching, usually he will have taught at 10 different levels.

The apprentice's schedule during the two weeks of teaching at each of the different instructional levels begins with observation on the first two days, followed by a gradual taking over of classes until the last day of the second week when he teaches all classes.

The researchers reported the advantages and disadvantages of this pattern. In addition, they have used many illustrations for conceptualizing some of the problems encountered by student teachers. As a result of this experiment. Connor and Smith have proposed two models for teaching the inquiry model and the psychomotor analogy. This report is well written and is a very fine account of a new and innovative approach for student teaching.

A community approach to student teaching as described by Patterson (1966) was not an attempt to try a new way of organizing the student teaching experience, but rather an attempt to bring about a change in behavior by having the student teacher live in the community. It was thought that living in the community would produce teachers who could become acquainted quickly with the community, locate and use local resources, and adapt teaching to it.

Some of the findings revealed that the student teacher accepted the community approach to teaching and that home visits were the best way to understand families. A majority of former students related that the student teaching experience had been helpful in preparing them to teach units related to community conditions and student background but not in preparing them to teach adults.

Teacher educators should be encouraged to experiment continuously with innovative patterns of organizing the student teaching experience. Perhaps prospective teachers should begin student teaching on a limited basis and performing selected kinds of activities during the sophomore year and for extended periods of time during the junior and senior years, with each of the experiences carried out in a different school setting. The feasibility of such a plan is an important aspect to be considered. A combination of simulated and "real" teaching experiences is another suggested pattern.

Supply and Demand for Teachers

Only one study on the supply and demand of home economics teachers was available for review. It was initiated by the New York State Department of Education (1965) to verify the need for: 1) additional home economics teachers, 2) strategically located facilities offering graduate courses in home economics, and 3) updating the education of the present teachers.

Two questionnaires were sent to all known secondary home economics teachers in the state and to school administrators employing one or more home economics teachers. The teacher questionnaire included items on certification status, teacher preparation, frequency and duration of interruptions in teaching, and identification of the last calendar year of teaching service. By contrast, the administrators' questionnaire was concerned with determining the number of teachers employed during 1957-58 and 1962-63, the anticipated number of positions available in 1967-68, existing vacancies, and problems of hiring qualified teachers. Some of the results were: 1) 500 replacement teachers and 497 new teachers would be needed during the period 1964-68; 2) One-half of the teachers held permanent certificates, one-third held provisional certificates, and one-sixth were not certified.

The current trend of available teachers in all areas of education seems to be that for the first time in this nation's history there is a sufficient number. If the trend should continue, supply and demand studies would need to be conducted more often. The data would provide needed information especially in recruitment and the counseling of students.

Homemaking Teacher—Opinion Leader

Parker's study (1969) on the feasibility of using vocational homemaking teacher opinion leaders to introduce new ideas in vocational homemaking was determined by the use of a group-survey technique. One hundred twenty-four vocational homemaking teachers and three regional supervisors were asked to take part in the study.

Results indicated that opinion leaders were found to have more experience, education, and leadership, and participated in organizations more than others. They were chosen for demonstrated competency and knowledgeability. In addition, it was indicated that regional supervisors were able to identify opinion leaders. Finally, it was concluded that it is feasible to use opinion leaders as a way of implementing change in home economics.

Summary

This review of research in teacher education has been limited to those studies available through the ERIC system at The Ohio State University and to studies carried out from 1963-1970. In light of this, the areas of home economics education which need to be further researched include problems related to recruitment, counseling of students, and selection of prospective teachers. Ongoing research is needed in the evaluation of programs, professional commitment, teacher effectiveness, application of principles of learning, and the development of new and innovative methods and materials.

The adaptation of modern technological devices to the preparation of teachers needs additional investigation. The use of multi-media as a means of developing certain teacher competencies as in micro-teaching is an example. Another use of technology is in the area of classroom communication as illustrated by interaction analysis. Finally, the systems approach applied to the education of home economics teachers should be explored.

RESEARCH METHODOLOGY

Research Techniques

Although the studies herein are not conducted in consumer and homemaking education, they provide examples of research techniques which may well be applied to problems in home economics. Moreover, the summaries of the studies may give some insight into the kinds of research problems investigated by other areas of vocational education.

Mailing Techniques. A study to compare the effectiveness of three mailing techniques for stimulating the interest of persons who had previously been uninterested in conducting occupational education research was initiated by Bailey and Moss (1966). They hypothesized that two logical reasons why an individual might become interested in research were prestige and professional advancement or an intellectual concern about a specific problem. It is possible for an individual to become interested for both reasons.

The sample population consisted of 4,222 teachers in practical arts, vocational and technical education, guidance and counseling. To try to stimulate research interest, one of three treatments was mailed to each of the sample population: 1) a bibliography of occupational education studies being proposed, in progress or completed since 1963 in Minnesota; 2) a list of occupational education problems and problem areas considered important; or 3) both the bibliography and the problem list. A cover letter and a questionnaire were included in each. The questionnaire was returned by 156 persons.

Answers were sought to four major questions: 1) Is there a relationship between response rate to the postcard questionnaire and the three treatments when the potential respondents are employed in schools with (a) positive and (b) indifferent research atmospheres? 2) Is there a relationship between the research atmosphere in schools and (a) the total response rate to all three treatments and (b) the response rate to each of the three treatments? 3) Is there a relationship between response rate to the postcard questionnaire and types of schools with a positive research atmosphere? 4) Is there a relationship between response rate to the postcard questionnaire and the three treatments when the potential respondents are employed in each of various groupings of types of positive research atmosphere schools?

The data collected by the postcard questionnaire were subjected to chi-square statistical treatment to examine relationships between treatments, research atmospheres, and type of school. The .05 level of confidence was used.

The results showed a relationship between the response rate and treatments for persons employed in positive research atmosphere schools. The problem list treatment produced the greatest rate of returns, and was therefore, considered the most effective of the three mailing techniques (see objective 1). There was no relationship between the research atmosphere in schools and (a) the total response rate to the bibliography treatment, or (b) the response rate to the problem list treatment. However, there was a significant relationship between research atmosphere and the response rate to the combination bibliography-problem list treatment. Persons employed in schools where there was an indifferent research atmosphere had a higher response rate to the combination treatment than persons in schools where the research atmosphere was positive. (see objective 2)

There was no relationship between response rate to the postcard questionnaire and persons employed in positive research atmospheres in junior and senior high schools, vocational and technical schools, and colleges (see objective 3). There was a consistent trend in response rates among various combinations of types of positive research atmosphere schools which indicated that the problem list treatment was the most effective and the combination treatment the least effective. The relationship between response rate and treatments was significant in junior high schools, colleges, and vocational and technical groups, and approached significance ($P=1.0$) for other types of schools (see objective 4).

David Pucel, *et al.* (1966) conducted two surveys for the purpose of estimating human resources for research in occupational education. One survey identified educators in Minnesota who were interested in conducting and receiving training for research. A second survey identified educational administrators who possessed supportive attitudes toward research.

A questionnaire was sent to 5,441 persons which included vocational educators and guidance counselors in junior and senior high schools and colleges. The results of this first survey revealed that 8.2 percent were interested in research. Furthermore, of this group who expressed an interest, 48 percent had adequate research experience. The most interested persons were in industrial arts, guidance, and business and distributive education. Only 31 or 3.2 percent of the questionnaires sent to home economist teachers were returned. However, all of them expressed an interest in research.

The second survey sought to assess the attitudes of superintendents, principals, directors, and department heads toward research. Approximately 54 percent of the administrators expressed a supportive attitude. They saw local contributions as the most serious obstacle to the initiation of occupational research. Of this group of administrators, the superintendents were most willing to make adjustments and as a group tended to be the most optimistic about the possibility of initiating research.

Data for the second survey was secured by means of a postcard questionnaire and was analyzed statistically using the chi-square treatment.

Systems analysis and synthesis. The goal of Silvern's study was to ascertain the feasibility of developing a model using a systems approach to describe "real life" feedback signal paths from outside the secondary school to an occupational teacher. He described the term "systems approach" as the application of analysis and synthesis to a system. In this study, the researcher used the word "system" to connote "human performances."

The research procedure was carried out in the following steps: 1) Identify elements which exist outside the secondary school subsystem from which information flows through a feedback signal path into the school system; 2) Select from the elements those which have a measured influence upon the curriculum; 3) Categorize, relate, and combine or restructure these elements into meaningful relationships thus creating a model; 4) Analyze the restructured model; 5) Evaluate the restructured model; 6) Synthesize a new model based on the evaluation by combining previously unknown or unidentified elements and their feedback signal paths; and 7) Evaluate the new model to determine if it has merit and is worthy of future study.

Data were collected by interviews, notes, and tape recordings from recent graduates, occupational teachers, supervisors, and directors of vocational education, university faculty members, and other professional persons. The data were synthesized and the result was a flow chart model. It is a cybernetic model with 49 closed loop feedback signal baths, each identified by five characteristics which in turn affect teacher performance. The general conclusion of the study was that it is feasible to develop a model which has an immediate and practical application.

EPIC. These letters represent the title of a structure and scheme for evaluating innovative programs—*E*valuative *P*rograms for *I*nnovative *C*urricula. This scheme of program evaluation is based upon a three-dimensional structure of variables which might affect an instructional program—the instructional, institutional, and behavioral dimensions. Four steps are followed in the process of carrying out the evaluation. These are: 1) identification of the variables affecting the program, combining variables into factors, writing behavioral objectives and developing an evaluative design; 2) program description and data gathering; 3) analysis of data; and 4) decision-making recycling process.

The report of the EPIC scheme included an article which illustrates how it can be used to evaluate an individualized reading program for elementary students.

OScAR. As reported by Medley (1966) the Observation Schedule and Record (OScAR) is a device that can be used to obtain quantitative descriptions of teacher behavior, in a limited number of dimensions, through direct observation. It is a card which contains a list of teacher behaviors the observer is to look for when observing a teacher in the classroom and a place to record the frequency of occurrence of each of the behaviors.

Behavior profiles obtained could be used to study differences in behavior of effective and ineffective teachers, to measure changes in teachers during professional preparation, to measure the effects of training on teacher behavior, and for a host of other purposes.

GOTE. Hill and Medley (1969) reported the development of a plan designed primarily for research in teaching effectiveness. A complete GOTE (Goal Oriented Teaching Exercise) consists of: 1) a four-day teaching unit, 2) specific objectives for pupils, 3) tests to measure pupil gains toward these specific objectives, 4) suggested teaching strategies, 5) instrumentation to describe teacher behavior, and 6) procedures for relating pupil gains to patterns of teacher behavior.

The materials used in a GOTE study included a teacher's manual, a resource unit, a statement of goals, sample test items, four equivalent forms of the subject matter test, and the OScAR.

Hill and Medley's report contained a description of a study conducted to test the effectiveness of the GOTE. Results of the study will be in a forthcoming publication, however the report contained all other aspects of the study.

Community Analysis. The purpose of a local community analysis is to provide a guide to local communities for making a self-evaluation that will provide facts needed in developing vocational programs. In a step-by-step schedule outline, Cromer (1968) identified the procedure to follow in determining vocational needs. Briefly, these were: 1) initial explanation of local needs, 2) local organization, 3) definition of scope of study and time table, 4) fact gathering, 5) fact summarization, 6) analysis and interpretation of data, and 7) action step. Cromer indicated that it is doubtful a vocational needs study by a local community would include all the phases suggested.

Community survey. Baumel, *et al.* (1964) has provided a general guide to organizing and conducting reliable and useful community surveys. The community survey is a technique often used to obtain information needed to make certain kinds of decisions. This publication presented excellent information on organizing for a survey, constructing the survey questionnaire, sampling, distributing and collecting questionnaires, tabulating and analyzing, interpreting survey results, and using the results. A survey checklist and sample community survey questions have been included.

While the entire publication is helpful, the chapters devoted to construction of a questionnaire are especially good. The author provided suggestions on securing ideas for questions, directions on how to work the questions, writing structured and unstructured questions, advantages and disadvantages of each, how to order questions, the pre-testing of the questionnaire, and the significance of respondent characteristics. Another valuable section for the beginning researchers is the one devoted to sampling. Topics discussed were reasons for sampling, methods of sample selection, drawing the sample, and sample size.

This publication presented some basic principles of research that are applicable to research techniques other than the community survey.

Area Skill Survey. The national Bureau of Employment Security has published a handbook (1965) that describes the procedures and techniques to use in an area skill survey. Such a survey is used: 1) to supply information about job opportunities in a selected area for use in employment counseling, 2) to provide a tool for local use in job development activities, 3) to augment information about local manpower resources, 4) to promote training courses in local schools geared to labor requirements of the area, and (5) to stimulate local employers to evaluate their own manpower needs.

The handbook provides information on the methods and procedures of conducting an area skill survey. Parts I and II supply directions for preparing the area skill survey schedule as well as information on selecting the sample, tabulating the data, and presenting the findings. Other helps included are: 1) a sample publicity release to stimulate community interest in the survey, 2) non-response follow-up procedures, 3) directions for a partial response, and 4) a sample questionnaire for obtaining future labor supply from schools and other groups.

The research techniques presented here should be helpful in establishing, developing, and evaluating home economics wage-earning programs. The area skill survey and the community analysis survey are two research techniques that would help to glean information needed before establishing a home economics wage-earning program in a local area. Systems analysis and synthesis and EPIC are techniques that could be tried in both consumer and homemaking and wage-earning programs. The GOTE scheme of teacher effectiveness and the OScAR device are ideas that could be tried during student teaching.

Evaluation of Vocational Programs

The reviews presented here represent ideas and opinions on: 1) the difficulties of conducting research on programs for the disadvantaged, 2) a model for the evaluation of vocational education programs, 3) a system for state evaluation of programs, 4) an interstate project that includes program evaluation, and 5) criterion problems and curriculum evaluation.

Programs for Disadvantaged. Walther (1968) reported the experience of a research group in studying a Neighborhood Youth Corps program. The report did not present the operations of the program but rather discussed some of the problems inherent to this type of program research. Four types of problem areas described were: 1) criterion, program, and moderator variables; 2) samples; 3) control groups; and 4) interviewing.

The types of criterion variables discussed were: increased employability, community adjustment, self-support, additional education, and changes in attitudes and behavior. The program variables were: length of work, hourly pay, characteristics of work station, and counseling programs. Moderator variables identified and described were: disadvantaged graduate type, adverse situation type, rebel type, and low self-esteem. The advantages and disadvantages of three types of samples that were presented were: the entry, current enrollee, and termination. Control groups discussed were: random assignments, applicants who are not accepted in the program, employment service files, nominations from school, and nominations from peers.

The author stated that the locale of poverty programs makes it difficult to evaluate them. She stressed the importance of further experimentation to establish guidelines and methods.

Evaluating Model. A manual has been written by Bruce W. Tuckman (1967) that included the development and testing of an evaluation model for vocational education. The model was based upon the Gagne technique of stating final course objectives in behavioral terms and then subjecting the behaviors to task analysis. The results of the analysis are then presented in a behavioral hierarchy of tasks and subtasks. The hierarchy serves as a basis for writing content valid items which measure the behaviors previously identified in the objectives. The manual provided a step-by-step procedure for carrying out this technique of evaluation.

The results of trying out the model indicated that the behavioral hierarchy which serves as a basis for developing test items is in need of some revisions and that performance items were more accurate than written ones in measuring behavioral competency. It was recommended that further investigation is needed to substantiate the reliability of the results. However, the evaluation model provided a means of securing data about the degree to which a pilot program accomplishes its objectives.

The manual is especially helpful for developing an understanding of how to identify and state behavioral objectives. One chapter is on the technique of task analysis and another chapter discusses the development of test items. The appendices included a curriculum hierarchy for evaluation of course knowledges and three check tests of achievement.

The preliminary procedures and the initial development of a model system for evaluation of state vocational programs were presented by Starr (1969). The system has been described as one which facilitates program decision-making by merging information about national and state interests, student benefits, and manpower requirements. Included were a general system for continuous self-evaluation of programs, objectives of vocational education, program goals and data needed to appraise them, and evaluation procedures. Field tests of the proposed model were incorporated into the report. The appendices contained information on advisory committees, program objectives and goal statements, and face sheets of the instruments used to collect data during the field tests. The revised model is undergoing further field tests and results will soon be available.

Interstate Research. A report of a development project for interstate research in a New York-Connecticut area discussed the objectives, problems, and general feasiblity of the research effort (1967). The objectives in developing the interstate project were to find solutions to problems of vocational education confronting a regional area and to develop a framework for a regional approach to research. Six studies completed under interstate contracts were in the areas of agriculture, multi-occupations, business and technology programs, teacher competency measurements, predictive tests of student success in trade occupations, and home economics occupational programs.

The report provided a discussion of some of the problems of interstate research. Two of the problems were related to the initial lead time needed for subcontracting services to conduct the studies and the legal difficulties involved when one state agency attempts to deal with a state agency in another state.

It was felt that: a) With the development of an interstate research program, partial answers have been found to major problems in vocational-technical education in the New York-Connecticut area; and b) The channels of communication among research organizations and between such organizations and the states involved, have been made into an effective framework for a continued regional approach to research.

Criterion Problems and Curriculum Evaluation. Donald Leton's (1966) report consisted of his presentation on criterion problems and curriculum and two responses to his presentation as made by Ralph Mason and Robert M. Wasson. The entire report is most interesting. In essence, the premise of Leton's theory was that the evaluation or devaluation of curricula requires the validation and invalidation of theory and is not determined by philosophical dispute. When a curriculum or program is considered as a closed informational system, internal criteria may help its sequence and establish its consistency but cannot validate it. To appraise a closed informational system, relevant information outside the system must be identified and tested against that which is inside. Items within may be retained or removed. Outside information represents an external criterion of the inside information Other criterion problems were examined in the context of the report.

Responses to Leton's presentation were equally informative and interesting. Wasson pointed out that one may choose to define research differently. He explained that when research is so narrowly defined as the confirmation or refutation of a theoretical position, it severely limits the possibility of substantial advances in the area of curriculum research.

Forecasting Manpower Requirements

Studies have been reviewed which illustrate four approaches to forecasting manpower needs. Two of the studies are related directly to forecasting manpower needs in vocational education. The latter studies are examined first in this section.

Phase I of the Oregon statewide study of vocational education was concerned with manpower needs, data collection, and occupational clusters. Watson, *et al.* (1965) has written a report on this phase. It included an extensive examination of three techniques used to collect data: 1) questionnaires, 2) projection by regression techniques, and 3) interindustry analysis and projection.

The questionnaire is a necessary instrument to use in almost all research studies in vocational education today. Although it has been rejected as a means of collecting data by some (the Bureau of Labor Statistics), several different survey questionnaires were developed and used in the Oregon study—The Student Survey, The Dropout Survey, The Employer and the Employee Surveys, and The School Personnel Survey. It was decided that questionnaires could be used to clarify certain technical problems and to gather historical data.

The advantages of the projection by regression techniques were that it is economical in terms of time and money, it provides almost automatic inclusion of trends, and it relates local analysis to work going on at the national level. The authors suggested that this method should be used along with a questionnaire.

The interindustry analysis is sometimes known as input-output analysis. Its advantage is that it is structured to trace the effects upon one industry resulting from change in another. Data is present in matrix form. Along one side all the outputs of an industry are listed. On the other side all the inputs from other industries are listed. After all details are carried out, such as changing dollar figures to labor coefficients, the number of people can be determined that are required to produce a determined amount of goods and services.

Each of the data collecting devices discussed have advantages and disadvantages. No single device is available that will serve the purpose of collecting all the information needed to make projection on manpower needs. Therefore several devices are required in such research.

In addition to the preceding information, the authors have included a detailed account of Phase I of the Oregon statewide research study on vocational education.

Morsch and Griest (1967) have presented a research plan to develop a workable method that will project needs of vocational education as related to the labor market. The research plan is the Occupational Education Requirement Analysis or OERA system. This system is a three-step process: 1) It assumes employment projections to a target year for each of a number of economic sectors; 2) It assumes information on the proportion of total employment in each economic sector with selected types of educational preparation; and 3) The end result is obtained by multiplying employment sector by sector in the selected state or locale by these proportions and summarizing by the type of education.

Manpower forecasting has been thought of as a way of learning something about the future requirements of the labor force. As a result vocational education plans can be made accordingly, or the effects of new technology and automation can be anticipated and program adjustments made. There are other such uses for a way of predicting manpower needs. Morton (1968) has indicated that very few, if any, of the techniques used in manpower forecasting are satisfactory. In his publication, Morton described and evaluated some curve fitting techniques, direct manpower forecasts, derived manpower forecasts, and econometric models. Although each of these techniques was identified and explained, the author could have pointed out the advantages and disadvantages of each.

The concluding section presents forecasting techniques in relation to: 1) short-term versus long-term forecasting, 2) stochastic versus the deterministic approach, 3) point versus interval forecasts, 4) unconditional versus conditional forecasts, and 5) first order versus high order.

It is most difficult to conceptualize the many methods of conducting research on forecasting manpower. Mehmet (1967) has published a document through the Ontario Department of Labor which presented the: 1) econometric method, 2) productivity method, 3) trend projection method, 4) employer's survey method, 5) method of forecasting specialized manpower requirements, 6) inter-area comparisons method, and 7) elasticity of factor substitution method. The steps comprising each method were explained carefully and illustrations were made of how to use them. One chapter dealt with the problems of coordinating educational planning with manpower forecasting. The document contained a comprehensive bibliography of 153 references.

Perceptions of State Vocational-Technical Educational Agencies

Allen Lee (1967) reported efforts to develop instruments that would assess the expectations and perceptions of state vocational-technical education groups and their influence upon local programs. Several preliminary drafts of instruments were developed and field tested in five states. Following the field tests, the early drafts were refined and improved, then field tested again. This procedure was repeated a number of times. The appendix contained a copy of the final revised instrument. A format was developed to follow when using the instrument. Each step of the process was described in the report.

Initial responses to the instruments tended to indicate that there was a taxonomy of educational leadership change. It appeared that it was part of a continuum of activities. The instrument seemed to differentiate among groups of respondents relative to the role of the state division of vocational education.

Developing instruments to measure perceptions of individuals and/or groups of people is a difficult task. Little or no research in this area has been conducted in home economics. The field of vocational education needs to promote this kind of research. Perceptions of the supervisor's role, teacher's role, student's role, and many others need some additional study.

Behavioral Research

Three studies deal with the problems of measuring motives influencing need to achieve in vocational education, measuring occupational skill level, and stimulus-response analysis of real human behavior.

Heltzel (1966) sought to measure the motives of secondary students which influence the need to achieve. She was able to devise an appropriate instrument but did not have an opportunity to use it in an experimental situation. A proposal was developed for using the test. The report explained in detail the procedure used to develop the instrument "Trying to Achieve."

The purpose of Gutcher's study (1968) was to develop a measuring device to determine skill level required for various occupations for use in training, counseling, job placement, and measuring labor force quality. The device was used in a research situation. Some of the information collected was: general education development, specific vocational preparation, aptitude, interest, temperament, physical demands, percent of workers with less than high school education, median school year, and median salary.

Arthur W. Staats (1968) has written an article which presented an argument for the need to deal with concrete stimulus-response principles of learning on which behavior is based, and study behaviors that are representative of real life behaviors. He suggested that we junk our traditional categories of behaviors and junk the related concept that there are unitary processes underlying the categories. Furthermore, the author indicated that the present research strategy has been laboring under two faculty ideas: 1) a concern with underlying, inferred mental process, rather than with actual tasks or behaviors; and 2) a belief that behavior and problem solving can be functionally divided into perception and performance. He stresses the need to shift emphasis to concrete functional analysis.

The problem of developing sound measuring devices that assess affective learnings is still one of concern to research in all disciplines and fields of knowledge. Home economists have always been concerned with the affective learnings of youth, however, they have conducted a limited number of studies in this area.

New Developments in Research

An excellent source that summarizes nicely the new developments in research is the paper that was written by Pruzek and Kleinke (1967). Advances in statistical theory were discussed. Some of the newer methods presented were nonmetric data analysis, latent partition analysis, multivariate analysis, factor analysis, and analysis of covariance. The authors stated that very little research of a scientific inferential nature is being conducted using multivariate methods of analysis. Increased use of these methods was recommended. The paper dealt mostly with newer methods of statistical analysis rather than newer methods of research design and data collecting. However, the authors suggested that research needs to determine whether different methods lead to substantially different interpretations of data and whether algorithms are computed differently when machines and programs of different designs are employed.

Research Resources

One of the most difficult problems in conducting research is to locate and/or develop an instrument which will assess the desired date. The Home Economics Education Division at the University of Kentucky (1962) has developed and made available a listing of evaluative and other types of instruments. The instruments listed measure attitudes, abilities, degree of improverishment or enrichment of home life, self acceptance, beliefs, evaluation practices, clothing selection, learning experiences and professional education, educational achievement, program planning practices, employment of graduates, background of students, teaching and program effectiveness, marriage expectations, family adjustment, administrator opinions, behavior characteristics, values, sociability, temperament, sex role identification, problems of youth, and many others.

David S. Wilder's chapter on problems of evaluation research from the reference book, *An Overview of Adult Education Research* by Brunner, *et al.* (1959), presented excellent information on the evaluation of programs. Perhaps the most significant contribution was the discussion of some guides to further research in adult education. The guides are basic to all research endeavors.

A common concern of many researchers in education and in home economics is how to disseminate research so that it is of use to others. Nan Lin (1968) has examined research methods used in disseminating research and has suggested research methods which might help provide a better understanding of the disseminating process. Three methods which offer promise in solving some of the problems of studying educational change were: 1) field experiment, 2) computer simulation, and 3) structural analysis. Each of the three methods was explained and an illustration of its use in a particular situation was provided.

Summary

This section has presented research reports, papers, and other references that illustrate a particular research technique, provide models for program evaluation, describe the various approaches to manpower forecasting, or describe some recent developments and helpful resources for research. The intent has not been to evaluate the value of the research, or to criticize the research design, the instruments used, or the statistical treatment applied to data. Rather, the intent has been to stimulate research ideas that may be applied to home economics. It was believed that the kinds of information reported and the organization of that information into the chosen sequence would help to accomplish this goal.

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