(This panel was presented by staff members of Iowa State University. The panelists were: Dr. Helen R. LeBaron, dean of the College of Home Economics and panel leader; Dr. Wilma D. Brewer, head, Department of Food and Nutrition; Dr. Glenn R. Hawkes, head, Department of Child Development; Dr. Margaret I. Liston, head, Department of Home Management; Dr. Marguerite Scruggs, head, Department of Home Economics Education; and Dr. Margaret C. Warning, head, Department of Textiles and Clothing.)

Dean Helen R. LeBaron: Our principal role as home economists working in other countries is to make our assistance dispensable. We must find ways to help their home economists to become self-sufficient:

1. They must be able to develop programs at the university level to prepare their own home economics personnel. This means graduate education.

2. They must be able to develop their own teaching materials. Much of our material is not appropriate for use in other countries.

These are compelling reasons for focusing our efforts on helping others develop graduate and research programs as rapidly as possible.

Our experience at ISU is limited to one country, India. The work in which we are engaged is made possible by that previously done by the University of Tennessee as well as the efforts of the various church missions. The task requires patience, both on our part and on the part of the people of the country itself. Graduate programs are often started before sound undergraduate programs have been developed.

What are the special considerations involved in initiating a graduate program in home economics in a foreign university? A major consideration is that it fit in with the goals of the nation concerned. Before undertaking the program in Baroda, India, we talked with people in government and in various governmental agencies. The University Grants Commission found that during the ensuing five years some 700 persons with M.S. degrees would be needed in home economics. This seemed extravagant, but it was a clear indication of the need. It is necessary to know that the university desires to have home economics and is ready to support it. There is a need for a clearly written statement on this point.

Also it is important to have some indication that growth in student numbers at the undergraduate level suggest a need for graduate work. For example, at the beginning of our work in India home management was not sufficiently developed to warrant the initiation of a graduate program in this subject; so it was delayed. Another factor to consider is the availability of the supporting
sciences and arts. These may not be available at the level needed for graduate study in the various areas of home economics. Other questions to be asked are: Will our contribution fit into the graduate education system of the country concerned? In building a body of knowledge for home economics in another country what are the most basic problems to attack? Where do you begin?

Dr. Margaret C. Warning: Try to understand the philosophy of the people with whom we will be working. For example, course work is not an important part of the traditional graduate program in India. Independence of study and research completed are important. One must find out what the particular emphases are in graduate education in a country before starting to do either research or graduate work.

Dr. Marguerite Scruggs: In relation to what are the most basic problems to attack and where you begin in home economics education, the home economics education personnel have started with studies to obtain information essential for making decisions about objectives to be sought in the educational program. Tyler\(^1\) discusses these sources of information for determining objectives and suggests: (1) studies of the learners themselves, (2) studies of contemporary life outside the school, (3) suggestions about objectives from subject specialists, (4) the use of philosophy in selecting objectives, (5) the use of a psychology of learning in selecting objectives.

At Baroda, studies of the learner have included investigation of characteristics of graduate students in the home science program as a means of determining their educational needs, of practices in the homes, and of problems related to home science that are recognized by adolescents. The determination of educational needs calls not only for studying these characteristics of learners but also comparing the findings with standards that are desirable or acceptable so that the present characteristics of the learner can be compared with the standards in order to determine the educational needs. The need for such standards also raises the question of who establishes the standard.

Dean LeBaron: Another question: How does one go about finding what the resources are and what has been done already?

Dr. Glenn R. Hawkes: In child development there seemed to be a lack of what might be called "storehouses of knowledge." In the various fields it is important to make a survey of the knowledge resources and to explore contacts with related professions which may have initiated research work in their field of interest but which also may be related to home economics. For example, contacts were made with an institute in Ahmedabad that was superior in child development, and from that contact many other valuable contacts were made.

\(^1\)Ralph W. Tyler, Basic Principles of Curriculum and Instruction, The University of Chicago Press, 1950.
The importance of developing an appreciation of the culture of the people and of the people's resources cannot be overemphasized. These things are basic for the development of research which will have real meaning for another country.

Dr. Wilma D. Brewer: Several references have been made during the symposium to the critical need for research in food and nutrition in technically developing countries. The need is especially great in relation to the nutrition and food of families. Yet there has been extensive research on world problems of food and nutrition during the past 20 years. The research, supported by foundations, government, and international agencies has been conducted by workers from multiple disciplines including bio-chemistry, medicine, and agriculture.

Active programs in nutrition are under way in several centers in India. At the same time there are relatively few persons who have been trained in food and nutrition and who are qualified for research and graduate teaching. Thus the support of related disciplines is essential for a strong program of food and nutrition to be developed within home economics. Baroda University is fortunate that Dr. C.V. Ramakrishnan, head of biochemistry, recognized the contribution which food and nutrition could make to the health and welfare of Indian people and accepted the responsibility for the guidance and direction of the program. Close cooperation between the two departments has helped to make maximal use of resources of personnel, facilities, and funds.

Dr. Margaret J. Lis: During the first two years of the home management phase of the Baroda project, main attention was given to strengthening the undergraduate program. However, at the end of this period a curriculum for the master's degree in home management was developed and approved. As graduate enrollment increased and as staff resources became available for implementing graduate study and research, some exciting and highly relevant research began to emerge. This is oriented to identification of family needs and to development of facts and principles which can be used in helping to meet major needs. If sound subject matter relevant for education for family life in India is to be developed, research related to the major problems is a must. Toward this end, excellent cooperation of several governmental and industrial organizations has been obtained.

One example of a study just now being completed is a comparison of the uses and costs of several cooking fuels as observed under living conditions of about a dozen homes. This well designed study was financed by the Burmah Shell Company. A staff member from the Physics Department was loaned to assist with the study.

Another kind of research being initiated relates to government housing. Here again, with the help of several government housing organizations, studies aim to determine the housing problems of families who live in government facilities and to develop recommendations for dealing with these problems.
A third type of research relates to development of standards for household equipment. On this there are excellent reciprocal relationships between the Baroda researchers and the Indian Standards Institute. A fourth area of research involves exploratory studies of the homemaking roles of Indian wives.

One of the many impressions I had during our brief observations of the instruction, extension, and research activities in a few areas of India was that they encounter many difficulties in the application of basic principles to their local situations. Part of this is due to differences in the cultural patterns among the various states of India as well as in the religious and social classes within states.

**Dr. Scruggs:** Dr. Mattie Pattison is preparing an annotated bibliography of research related to all areas of home economics. She has been bringing together all of the information about studies that have been conducted by personnel in such fields as social work, extension, education, and psychology, as well as home science.

**Dean LeBaron:** Why are we emphasizing research in our graduate program in India? Traditionally Indian universities award masters degrees after two years of course work. The Ph.D. is the research degree. There is great need for information from research for use in the home science teaching program. The spirit of research has been contagious with the Baroda Indian faculty. A great difference in attitude was observed after they became interested in research. In addition to contributing to the store of knowledge the master's thesis research has provided stimulation to the faculty.

What are some of the differences between working with graduate students abroad and in the U.S.?

**Dr. Warning:** Working with Indian students in Baroda was very gratifying. The eagerness of the students to learn and to progress was stimulating. It may have been unusually keen because for several months the students had looked forward to the program which we were initiating there and to our arrival. In the first year on the project we had nine students studying for master's degrees in textiles and clothing. For a time some of the students undoubtedly failed to understand what I was trying to say, and they were too polite to tell me that they did not understand. With better acquaintance they began to ask for repetition, explanation, and for personal help. This is a relationship or a state which took some time to develop. One must recognize a considerable difference in semantics. For example, to them, the work "paper" meant an examination. There are many other terms that had different connotations to the students and to me. Another point of importance in working with people and graduate students in other countries is an alertness to their feelings. One encounters certain handicaps too. Library books are not always handy to get. Typewriters and skilled typists are scarce.
Students became so enthusiastic about their work that they did not wish to go home even during the holidays. They were willing to keep right on working on their research or theses. In fact they would consume all seven days of the week if you did not protect them.

**Dr. Scruggs:** It was thrilling to sit in on conferences in which students were telling about their research. The amount of effort required to get the data in India appeared to be much greater than is required by graduate students in this country. For example, in obtaining information about pupils or home economics teachers in secondary schools, the graduate student in India went to the schools to conduct interviews. To obtain similar information in this country, the graduate student could probably have received excellent response from mailed questionnaires.

**Dean LeBaron:** What elements of our graduate program can be safely transplanted? Which cannot?

**Dr. Hawkes:** Factual material related to the growth of children and to the development of families has much universal meaning. Knowledge gleaned from studies in various cultures gives us a basis for comparative studies which illuminate similarities and differences in various parts of the world. These ideas can be safely transplanted. Furthermore, research techniques and related knowledge can be transplanted if one takes into account differences in the level of development in the various countries.

Values and goals necessary in understanding child development and family relationships cannot be safely transplanted. These values and goals must grow out of the knowledge of a particular country in which a person is working. It is highly inappropriate for us to impose our values and goals on countries other than our own.

Many of the attitudes important in cooperative research can be developed in this country and safely transplanted. Furthermore a philosophy of cooperation, which incidentally seems to be most advanced in this country (USA), can be fostered and should be exported.

**Dr. Warning:** The use of course work to prepare for research and to gain knowledge of a high level should be transplanted. Seminars and discussions which develop exchange of ideas and thinking rather than memorizing are valuable to transplant. We should not try to transplant some things such as our grading system. This is hard to avoid since many faculties are western educated. An additional observation is that a little hesitancy exists on the part of some parents to accept western education.

**Dean Le Baron:** The value of all home economics programs in any country depends on the quality of the graduate program in that country.