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THE ROLE OF THE VIRGINIA POLYTECHNIC INSTITUTE IN VIRGINIA AGRICULTURE

Family Living Committee

Immediate needs which the Virginia Polytechnic Institute should meet:

- A. As the Home Economics Department at Virginia Polytechnic Institute is merged into an over-all School of Home Economics, certain adjustments will need to be made. First will be a revision of the whole curriculum in an attempt to meet more varied demands of a larger group of students. This will necessitate additions to the Home Economics Staff in resident faculty, research, and extension.
- B. The Virginia Polytechnic Institute should, at its very earliest convenience, develop housing facilities, laboratories, and classrooms for accommodating a much larger enrollment of home economics students. The employment needs for trained home economics personnel in Virginia are much greater than the supply of home economists.
- C. The appointment of a dean of women at Virginia Polytechnic Institute is highly desirable for the best welfare of women students.
- D. The Virginia Polytechnic Institute should become the conference center for groups interested in the welfare of the family as it now is for agriculture and to some extent for industry. In addition to the facilities for housing conference groups, the Virginia Polytechnic Institute will need to provide a well-trained staff for handling these family conferences.
- E. The Virginia Polytechnic Institute should develop at the very earliest date facilities for continuing education for all groups in the State. The dormitories and many other facilities are not available during the school year for conferences.

Some of the groups which need special help with continuing education for family living are:

1. Elementary and secondary teachers.
2. Extension personnel and youth and adult leaders.
3. Community leaders.
4. Professional women's organizations.
5. Women's clubs.
6. Family welfare leaders.
7. Youth groups such as church and state.
8. Professional and semi-professional workers.

I. Long-Term Needs Which the Virginia Polytechnic Institute Should Meet:

A. Situation and Problem

Implications for V.P.I.

INCOME

1. Situation: According to the 1950 census, the proportion of Virginia married women in the labor force increased 49% from 1940 to 1950. In 1950, 26.3% of the urban married women, 10% of the rural farm married women, and 18.2% of the rural non-farm women were employed outside the home. There is very little information on the effect of this shift on family life.

Problem: How can the two-job housewife use her time at home most effectively for the good of all family members.

2. Situation: The percentage of women working as domestics in households has decreased in the last 20 years.

Problem: What services are needed for the home to help replace the lack of employed domestics? How can other services for the home be provided and used effectively?

3. Situation: Virginia women (except clerical workers) receive a lower average wage than do women in comparable positions in the rest of the nation; and the family income in Virginia is more than 20 percent below the national average.

Problem: How can families increase their income or make better use of the available income?

1. Implication: With the home becoming more of a consuming unit than a production center, more emphasis needs to be placed on training of home economists to help them as they work in high schools, colleges, and extension.

2. Implication: Research should be made to (1) appraise the extent to which the programs now offered in the college and extension service are meeting the management needs of Virginia families; (2) ascertain the services now available to Virginia homes and if these services are used effectively; and (3) what other services are needed.

3. Implication: Studies need to be made of the use of family income in Virginia. It is not known how the income of women is being used, and whether the two-income family is more stable financially than the traditional one-income family.

4. Situation: There is no available accurate information on the practices of families as to the amount, kind, and proportion of family income used for expenditures including savings and insurance.

Problem: How can this information be secured?

4. Implication: Research needs to be made to ascertain the amount, kind, and proportion of family income devoted to family expenditures including savings and insurance. This information is needed for extension and resident teaching programs in home economics.

EDUCATION

Situation and Problems

1. Situation: Although the educational level of women in Virginia increased approximately one grade between 1946-1950, 47.4 percent of the women still have an elementary education or less. The man power commission feels that the chief source of additional workers for the future is in trained women. The State of Virginia cannot compete adequately with other states with a less well-trained labor force. V.P.I. is the chief source of technically trained man power in the State, therefore, V.P.I. should meet the challenge of training more and more women for these jobs.

Problem: How can V.P.I. best serve the educational and special training needs of the group of women with limited educational background who are now or may be drawn into the labor force?

2. Situation: The Land-Grant colleges are the chief source of trained home economists and women scientists. V.P.I. is increasing its effort to serve the needs of the State in this situation.

Problem: What should we do to develop a greater awareness on the part of the public and the legislators of the (1) special educational needs of women and the (2) plant equipment and (3) teaching staff needed to do the job?

Implications for V.P.I.

1. Implication: Initiate experimental programs to find the best way of giving women of low economic levels and limited educational background non-credit intensive training to better fit them for service in the labor force.

2. Implication: Start an action program through every communication media to present the facts regarding the status of women's education in Virginia and where further development is needed.

3. Situation: Virginia is not training or educating a sufficient number of home economists to meet the needs of the State in either Extension, high school education, college teaching, research or business. It has been estimated that to staff the home economics positions now existing in Virginia the following home economists should become available yearly:

Extension	40
Business	25
High School and College Teaching	75
Nutrition, Dietetics and Institution Management	20
Child Development and Family Life	15

Problem: How should V.P.I. expend the present program to fulfill its obligation to Virginia to provide its appropriate share of trained home economists needed by the various agencies in the State?

4. Situation: Since the age at which persons marry has declined generally, concern must be expressed about youthful marriages and their future success or failure. The divorce rate is high for marriages under 20 and as marriage in this age group increases in Virginia the divorce rate may be expected to go up.

Problem: What can V.P.I. do to aid secondary school agencies to educate youth to face realistically and to accept the responsibilities of marriage?

3. Implication: Make a study of the present and potential demand for trained home economists and the State's facilities for supplying this demand.

Determine how much V.P.I. can and should do in light of proposed programs of other educational institutions in Virginia.

4. Implication: V.P.I. should develop a closer tie with elementary and secondary education through special conferences held for teachers on problems relating to education for family well being and integrity.

Extension teaching through youth groups should give more attention to the importance of family solidarity and in work with adults should be more concerned with the problems that beginning families have to cope with.

HOME ECONOMICS EXTENSION EDUCATION

Situation and Problems

1. Situation: At the present time five counties lack home demonstration workers (white) and only 33 counties have home demonstration agents (Negro).

Problem: How can greater interest in the home demonstration program be aroused in counties not now reached and new positions established and county appropriations secured for home demonstration agents in these areas which are not now served or not served adequately?

2. Situation: Two cities in Virginia now employ home demonstration agents. Eleven percent of the H. D. membership in 1954 was urban. Agents received more and more requests for assistance from urban people.

Problem: What policy should be established concerning Extension's responsibility in the urban areas and what financial support expected? How can the urban demands be answered best?

3. Situation: From 1950 to 1956 population in Virginia increased 10%. From 1949 to 1957 there has been an increase of 61% in the number of families the Extension program has influenced to make changes in their homemaking practices.

Problem: How can Extension continue to meet the increasing demands of a growing population, especially in thickly populated areas?

4. Situation: In 1950, 23.2% of the Virginia female population was composed of age group 25-34 years. Of the women 15 years of age and over, 36% were employed away from home.

Implications for V.P.I.

1. Implication: Place home demonstration workers (white) in the counties not at present organized and add 30 additional assistant agents in the next 15 years. Increase the Negro home demonstration agents by at least 100% in the next 15 years.

2. Implication: Place home demonstration workers in at least 20 urban areas.

3. Implication: Increase personnel by at least 75% in the next 15 years. Educate and provide a larger percent of the needed personnel at VPI (that is agents). Research needs to be carried on to determine what is an effective work load of a home demonstration agent.

4. Implication: V.P.I. (resident, research and Extension) must supply the home demonstration agents with facts and figures to meet the changing needs, if

In 1954, a survey of home demonstration club members showed that only 11% of the club members were under 30 years of age and that 18% of the club members were employed away from home. In 1957, of the 986,756 families in Virginia, 174,414 were reached by the home demonstration program. This is 17%.

Problem: How can Extension serve more adequately a larger proportion of the people, especially the young homemakers and the employed homemakers?

5. Situation: Virginia families, because of complex life today, are expressing a need for more varied subject matter information such as child development, family life, safety, etc.

Problem: How can the influence of Extension teachings be broadened to cover more kinds of information and to meet the increased demands for help in certain subject matter areas?

6. Situation: Homemakers employed away from home have a dual role of employment and homemaking. Adjustments are necessary to fulfill successfully each role. Adjustments in program are necessary also if home agents are to contact working women.

Problem: How can the Extension educational program be planned to meet this situation:

the agents are to be able to serve satisfactorily the homemakers of the state. Home demonstration agents need more undergraduate training in management and also more in-service and graduate training in management.

Implication: The specialist staff must be increased to include additional workers in the following: one in home management; one in consumer education; one in food and nutrition; one in clothing; two in house furnishings; one in housing; two in family life; one in safety; one in health; one in beautification of home grounds; in addition one person should be added in Extension education; two persons in program determination. In supervision, an assistant man and woman district agent should be added to each district.

6. Implication: The means for more use of mass media must be established, especially TV and radio. Additional agents will be needed in order to stagger the load and hold meetings at the time and place satisfactory to the working homemakers.

7. Situation: Farm population in Virginia is decreasing rapidly while the urban and the rural non-farm population is increasing. At the same time the Extension home economics program is reaching an ever-increasing number of urban and rural non-farm people and a gradually decreasing number of farm families.

Problem: How can Extension continue and strengthen its influence with the farm families and at the same time make available the needed information for rural non-farm and urban families?

8. Situation: Better housing, better health and health facilities and safer conditions are needed throughout Virginia.

Problem: How can Virginia families be made more aware of this situation and be encouraged and educated in the ways to adopt higher standards of living?

7. Implication: Research is needed to determine program adjustments for a changing clientele. More personnel is needed to provide more in-the-home work with families. More research is needed on the methods used most successfully in encouraging the application of the teachings.

8. Implication: More complete recognition of the actual problems of the families of the State is needed by the members of the resident faculty so that resident teaching may be more closely tied to the problems of the State. More research is needed based on the actual conditions in the State, which would provide the facts to be carried to the families of the State by the Extension workers.

#### FAMILY WELFARE AND HEALTH

##### Situation and Problems

1. Situation: With the increasing number of women working outside the home, problems of home supervision and child care are becoming increasingly great. There are increasing demands for services for children and youth to supplement the care and training of the home.

Problem: What standards and facilities are needed for care of children of working mothers which will supplement but not supplant parental care and guidance?

##### Implications for V.P.I.

1. Implication: V.P.I. should expand its facilities for training in child care both on an academic and non-academic basis offering courses for professional and semi-professional status.

Research is needed as to desirable minimum standards and facilities for child care centers.

2. Situation: Juvenile delinquency is on the rise, and it has pushed into rural areas.

Problem: What are the underlying causes of the increase in juvenile delinquency and how may they be corrected?

3. Situation: As the number and proportion of the population become aged, additional homes for the aged will need to be provided both by private and public funds. As these homes increase, there will be an increasing demand for trained personnel to plan, operate and staff these homes. Personnel service to the aged is a new professional field which is now developing.

Problems:

- (a) What kind of housing is best suited to the needs of the aged?  
(b) What kind of training is needed to equip personnel to care for the Aged?

2. Implication: Research on family and community implications of juvenile delinquency is needed to ascertain factors in family and community life associated with the rising rate and its extension into rural areas.

3. Implication: Research is needed as to housing and equipment which will aid the aging to prolong their independence as much as possible.

Experimental programs are needed in training personnel to operate and staff homes for the aging.

Situations and Problems

1. Situation: About one-third of the Virginia population has inadequate diets. It is believed that this is due to lack of knowledge and income.

Problem: How can this situation be improved?

Implications for V.P.I.

1. Implications: V.P.I. is in a unique position to train personnel in foods and nutrition through the combined efforts of Home Economics, Food Processing and Production in Horticulture, Dairy, Poultry, Animal Husbandry and Bio-chemistry. V.P.I. needs to carry on research which will answer questions related to why people select the food they do, and effective means of improving eating habits. There should be on-going research on dietary adequacy in order to know the nutritional status of Virginia citizens.

2. Situation: An increasing number of women are working outside the home, hence less time is available for meal preparation and service.

Problem: How can the educational and research program help these women to plan and serve more adequate meals with less time and effort?

3. Situation: Food costs are high. Although the proportion of the family dollar spent for food usually decreases as the income increases, in the last twenty years, the percentage spent for food has increased slightly.

Problem: How can we help families spend available food money more wisely?

4. Situation: The great variety of food products on the market complicates the consumer's problem in wise purchasing.

Problem: How can we help guide better food selection?

5. Situation: Many shifts have occurred in the present eating patterns of people. Some tangible evidences of shifts are: (a) Meat-type hog in place of the old fat or lard-type. Consumers now demand less fat in the diet because of recent publicity of the relationship between fat and heart disease, (b) The demand for less fat is also reflected in the shift in dairy cow type from rich butterfat producers (Jersey and Guernsey) to Holstein and other high milk producers, and (c) Increase use of fruits and vegetables, especially those high in Vitamin C and A.

2. Implication: Research needs to be done on the relationship of dietary adequacy and socio-economic factors such as: food costs, market practices, advertising practices, prepared foods, meals taken away from home, distribution costs and income. Resident and Extension teaching must find more effective ways of reaching the families of the two-job homemakers.

3. Implication: V.P.I. through research needs to re-evaluate the content and methods of foods and nutrition courses and services in resident and Extension teaching. V.P.I. should take leadership in holding conferences and workshops to give in-service training in food selection and nutritional needs to various groups of workers, including dietitians, health and welfare workers, managers and operators of Commercial Food Services, as well as Extension agents, leaders, and teachers.

4. Implication: V.P.I. needs to expand and strengthen its program in consumer education at the college and Extension teaching levels. Also more research on consumer needs and problems should be developed.

Implication: We are in a unique position in the State to help train in all fields of Home Economics and related subjects, especially in foods and nutrition. The Department of Food Processing, Economics and all the Dairy, Poultry, Horticulture, Animal Husbandry are all carrying on fine research programs which can help in the training program for graduates and undergraduates. The need for trained workers in the field is great and the available trained workers seriously lacking. V.P.I. has unlimited opportunity to serve the State and the South by providing such training.

Problem: How can we help Virginia people know the facts and needs of normal daily diets in order to improve food habits and combat food faddism?

CLOTHING AND TEXTILES

Situation and Problem

1. Situation: Although clothing the family requires approximately 13% of the family living expenditures, there has been no research supported financially by V.P.I. during the last fifty years designed to obtain information on clothing practices, problems, and needs of Virginia families.

Problem: How can we determine the manner in which this vast amount of money is being spent? How can it be spent more wisely?

2. Situation: The clothing and textile industry has become one of the major employers of Virginia citizens, especially women. Additional apparel and associated industries are being encouraged to come to Virginia.

Problem: Should V.P.I. assume responsibility for training leaders and personnel for these industries?

3. Situation: With an increasing number of homemakers working outside the home, there is less time available for home production, care and storage of clothing. Studies on clothing practices by certain homemakers in Virginia indicate that this major clothing problem of homemakers is centered around wardrobe planning, buying, care and storage.

Problem: What guidance do homemakers need from trained personnel on management of time, money, and energy in providing and caring for family clothing?

Implications for V.P.I.

1. Implications: Research is needed on the clothing practices, needs, and problems of Virginia consumers as a basis for improving the clothing and textiles educational program.

Based on research findings, college and extension staff should adjust instruction to help consumers find ways of spending their clothing dollar more wisely.

2. Implication:
  - (a) There is need for trained personnel in textiles, management, science and engineering.
  - (b) Short courses will be needed for various groups within this industry.

3. Implication: Research is needed to indicate to personnel where emphasis should be placed.

College and Extension staff should base teaching on findings of research in order to help homemakers solve their clothing problems more effectively.

4. Situation: Apparel fabrics have been drastically revolutionized in the last ten years. The increasing number of man-made fibers and the great variety of finishes applied to the natural fibers completely confuse the consumer.

Problem: How can consumers be provided with more information regarding the and use of fabrics in order to make more intelligent selections?

5. Situation: As the size of the older age group of citizens becomes larger, providing suitable clothing for them becomes an increasing problem.

Problem: What type of clothing is suitable for the aged?

4. Implication: Provide up-to date information to consumers on the selection, wear, and care of fabrics, through resident and extension teaching, short courses, literature, and other media.

5. Implication: Research needs to be done on clothing designs for the older age group - with emphasis on ease of dressing and undressing, comfort, simplicity, and ease of care.

#### HOUSING, EQUIPMENT, AND FURNISHINGS

##### Situation and Problems

1. Situation: Numbers of housing units have increased less rapidly than households, while size of units has decreased even more than size of household. Overcrowding emphasizes need for increased space, while families also demand more in facilities for convenience and comfort.

Problem: As these pressures continue, how may families be helped to get more space and convenience for the same or less money?

##### Implications for V.P.I.

1. Implication: V.P.I. has a unique opportunity for service in this field through cooperative efforts of the departments of architecture, agricultural engineering, and home economics. The present fine relationships should be maintained and strengthened as opportunity arises, for training students and helping families to obtain desirable housing within ability to pay.

Research is needed on housing space needs, flexible house plans, construction and finishing materials as methods.

Resident instruction should be intensified on sound planning principles as applied to houses which meet needs and incomes of large groups of the population.

Extension workers and teachers need more training in housing, and more information for guiding families with individual housing problems.

2. Situation: Houses continue to lack adequate storage spaces.
- Problem: How can we help people to get such spaces included in old and new houses?
2. Implication: Both resident and extension teaching should continue emphasis on good planning for adequate storage for good housekeeping and enjoyable living.
3. Situation: While 92% of Virginia farm families had electric lights by 1955, estimates indicate about 50% had running water and 10% had central heat.
- Problem: What might be done to get rural homes with running water increased to 75% and central heat to at least 25% by 1975?
3. Implication: Engineering research should develop better and less expensive equipment for water systems and house heating for houses of low and moderate cost. Extension should continue stress on more adequate wiring, water systems, and heating and cooling systems.
4. Situation: Production and sales of home appliances and equipment have grown faster than knowledge of how to plan for, select, finance, and use them to best advantage.
- Problem: How may people be helped to better relate to their own needs and abilities, the possibilities and uses of household equipment and appliances?
4. Implication: Research is needed on the percentages of homes supplied with specific useful items; performances of selected items; and factors involved in planning for, financing, and placement for use.
- Resident teaching should continue emphasis on preparing students to choose and use equipment wisely.
- Extension programs should help older youth and adults to plan for, choose, and use equipment well.
5. Situation: Home kitchens and related work areas are of first importance, especially to increasing numbers of two-job homemakers.
- Problem: How can we get kitchens better planned for work simplification, through design of space, arrangement, and equipment?
5. Implication: Continued and increased emphasis should be placed in training students in kitchen planning; and on Extension programs on this and related house areas.
6. Situation: Purchases of furniture and furnishings tend to reflect general economic conditions, and certain prestige factors.
6. Implication: Research is needed to learn more about why people select what they do, and on guides for buying furnishings.

Problem: How may people be helped to make wise decisions and selections of lasting value?

Resident teaching must continue its important emphasis on fundamental basis for choices. Extension programs should also provide continued teaching and guidance for actual and potential situations.

7. Situation: Selecting textiles for household use now requires much knowledge of the everchanging treatments of natural fibers and the characteristics of an ever growing variety of manmade fibers.

Problem: How can people be helped to select fabric furnishings for satisfactory service?

7. Implication: Ever more research is needed on textile durability and care.

Resident and Extension teaching must continue to provide the most up-to-date facts to guide consumers.

8. Situation: Houses generally are inadequately wired or equipped with lamps for lighting sufficient to reduce fatigue and save eyesight as much as possible.

Problem: How may people be helped to appreciate adequate lighting and obtain it for their homes?

8. Implication: The present state-wide cooperative project developed through the Virginia Rural Electrification Council program is directed to this end. Continued support by all V.P.I. departments concerned will be important to this program which may continue for at least 5 or 10 years.