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SCHRODER, CECILIA MARULANDA

**FAMILY-PLANNING EDUCATION PROJECT: A TEACHING MODEL
THROUGH HOME ECONOMICS**

The University of North Carolina at Greensboro

PH.D. 1981

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FAMILY-PLANNING EDUCATION PROJECT: A TEACHING
MODEL THROUGH HOME ECONOMICS

by

Cecilia Marulanda Schroder

A Dissertation Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
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Approved by


Dissertation Adviser

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

Dissertation Adviser Nancy White

Committee Members Michael B. Johnson
J. Allen Watson
Rebecca M. Smith
D. Gordon Bennett

May 22, 1981
Date of Acceptance by Committee

May 22, 1981
Date of Final Oral Examination

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This study was an attempt to develop a motivational approach to family-planning education through the teaching of home economics. The rationale for a motivational approach lies in the need to inculcate high fertility groups with the idea that family planning is a necessary condition for the family, if it is to attain the desired quality of life.

The three major components of the study were:

1. To design a model for teaching family planning through the following areas of home economics: nutrition and health, housing, clothing, and child development and family relations. The model seeks to introduce motivational appeals for family planning through these areas of home economics, and to introduce effective teaching methods appropriate to the educational level of the audiences and facilities of the educational settings.
2. To evaluate the usefulness and applicability of the family-planning teaching model.
3. To revise the teaching model and introduce the necessary changes suggested in the evaluation.

The teaching model was comprised of eleven lessons within four teaching units corresponding to the four mentioned areas of home economics. Each lesson plan contained behavioral objectives,

generalizations, concepts, learning experiences, teaching aids, and evaluation.

The evaluation instrument, a rating scale divided into two sections, consisted of a five-point scale ranging from "strongly agree" to "strongly disagree." The first section of the instrument, which consisted of 28 statements describing the requirements of a good lesson plan, was used in the evaluation of each of the lessons. The second section of the instrument, consisting of five statements, was used in the assessment of the feasibility and applicability of the family-planning teaching model.

Evaluation procedures were performed by six home economics students of the University of North Carolina at Greensboro, nine home economics students of the University of Caldas in Colombia, and eleven home economists of Colombia.

Evaluation data were tabulated and analyzed descriptively. Lesson statements in which 60 percent or more of respondents agreed were not subjected to revision; lesson statements in which less than 60 percent of respondents agreed were subjected to revision. The lesson plans were revised and the changes suggested in the evaluation were introduced in most lesson plans. Additionally, three new lessons were designed, having been suggested in the evaluation results, and were added to their respective teaching units of nutrition and health, housing, and child development and family relations. The revised teaching model on family planning accounts for a total of 14 lesson plans, discriminated as follows: five lessons in nutrition and health; three lessons in housing; two lessons in clothing; and four lessons in child development and family relations.

The second part of the evaluation concerning the feasibility and applicability of the teaching model showed positive results. Most of the respondents indicated that subject matter dealing with family planning could be integrated into home economics programs of Colombian institutions; furthermore, they found that the teaching methods were practical and the content of the lessons was appropriate to the prospective audiences of family-planning programs.

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CHAPTER I
INTRODUCTION

The rapid population increase of less developed nations has become one of the major concerns of world leaders, because of the vast array of social and economic consequences of uncontrolled population growth. Population experts have amply debated the strategies which can tend to deter the accelerated rate of population growth. Among these, family-planning programs were assigned a particular role in lowering the birth rates of high fertility populations. Nevertheless, family-planning programs alone have proved to be ineffective in reducing the population growth of less developed countries (Davis, 1970).

Davis (1970) maintained that a decrease in the fertility rate of a country will come about when altered economic conditions increase the cost of rearing children, and social changes affect the couple's reproductive decisions; thus, couples will be impelled to limit the number of births. Davis further concluded that a nation's population policy must promote these social and economic changes, as well as promote the establishment of family-planning clinics. A similar position was adopted at The First World Conference on Population held in Bucharest in 1973. The general agreement among participants from several countries was that fertility rates would not decrease unless the social and economic conditions of poor countries were changed (Estudios de Planificacion Familiar, Diciembre 1974).

The challenged view on fertility control prompted many leaders from developing nations to believe that both economic development and urbanization would eventually account for a decrease in birth rate as occurred in Europe where there were no explicit population policies. However, the conditions under which fertility rates declined in Europe were not comparable to those in less developed countries. Stycos (1968) pointed out that nineteenth-century European societies were characterized by higher literacy and less rigid social stratification, people married relatively late in life, and birth rates were considerably below those of the developing nations. Moreover, birth rates responded slowly to the process of modernization, since it took Europe 60 to 70 years to lower the birthrates to the current levels.

The search for effective measures which would tend to lower the high fertility rates of poor nations stands as one of the major challenges faced by population experts. Berelson (1969) classified several measures recommended to induce rapid changes in the fertility rates of poor nations. Some of his suggestions were: (1) the establishment of involuntary fertility control such as the compulsory sterilization of men with three or more children; (2) intensified educational campaigns, including population education in the primary and secondary school curricula; (3) incentive programs, such as payments for effective practices of contraception; (4) tax and welfare benefits, such as tax on births after the nth child; (5) changing social and economic institutions; and (6) approaches via political channels, such as United States insistence on population control as a price for food aid.

Some of these suggested measures raise serious moral and ethical questions, while others are difficult to implement for political reasons, or because of socio-cultural barriers. Feasible alternatives to fertility control might be those dealing with changes in the social and economic institutions along with population education at all levels.

Statement of the Problem

In the late 1960's the rapid population increase of Colombia, growing at a rate of 3.2 percent annually (Bravo, 1973), became one of the major concerns of the Colombian government. Uncontrolled population growth was creating severe negative effects upon the social and economic development of the country. Governmental concern was reflected in a population policy which intended to counteract the severe effects of rapid population growth.

The major goal of the Colombian population policy sought the decline of the rapid population growth by decreasing the high fertility levels. Several measures were recommended to pursue this particular goal, such as raising the people's educational levels with the purpose of fostering responsible parenthood, making available objective information on family life and sex life, and providing necessary medical services. The implementation of family-planning programs, first sponsored by private institutions, became the major step in the process of fertility control.

A decade later, in the late 1970's, the high rate of population growth had decreased from 3.4 percent to 2.3 percent (Perez, 1976).

Such decrease might be attributed to some social and economic changes but the effect of family-planning programs certainly accounts for much of this population phenomenon.

Family-planning programs are comprised of both clinical services and information and education campaigns. The latter are aimed at creating awareness of family planning, at diffusing the benefits derived from planning the size of the family, and at attracting potential users of family-planning services. These campaigns are usually launched through massive means of communication such as radio, newspapers, leaflets, and posters, and only a few are carried out through interpersonal channels of communication such as informal education programs. The program content is generally focused on human sexuality, reproduction, and contraception. Target groups are often made up of adults from lower socioeconomic levels of both urban and rural areas. Even though information and education campaigns have reached large segments of the Colombian population, a majority of women, especially from lower socioeconomic levels, still adhere to traditional attitudes regarding fertility control and remain reluctant to adopt family-planning practices. Such reluctance may be attributed to economic, social, psychological, and cultural barriers that prevent them from engaging in practices which can control their fertility.

The above considerations indicate (1) that changes in reproductive behavior cannot be obtained unless people feel strongly motivated to control the size of the family; and (2) that family-planning information and education programs launched through mass media

channels lack the strength and the persuasion power to foster changes in the reproductive behavior of high-fertility groups. Consequently, a different approach to family-planning education should be designed and implemented to reach the aforementioned groups.

The present study is an attempt to develop a motivational approach to family-planning education through interpersonal channels of communication. The rationale for a motivational approach lies in the need to inculcate high fertility groups with the idea that family planning is necessary if the desired quality of life of the individual, the family, and the community is to be achieved or maintained. The use of interpersonal channels is recommended on the grounds that such channels allow close interaction between the communicator and his audience. Through this means, family-planning messages can be more easily adapted to the needs, problems, interests, education, and cultural backgrounds of the target population.

It is suggested that home economics agents and field workers are in a unique position to engage in family-planning education. The nature of their work, which deals with education of families for better family living, enables them to approach family-planning education from a motivational point of view. Through informal education programs, home agents and field workers can reach large segments of population, especially those people in the low-income groups who usually present the highest fertility rates. The effectiveness of the program largely depends on the type of teaching techniques and educational procedures used by home agents and field workers in their task of promoting changes in values, attitudes, and behavior regarding family size.

Purpose of the Study

The purpose of the study was to design a model for teaching family planning through areas of home economics. The model seeks to introduce teaching methods and educational procedures aimed at helping home agents and field workers in their task of promoting behavioral changes in the people's reproductive behavior.

The three major components of the study were:

1. To design a model for teaching family planning through the following areas of home economics: nutrition and health, housing, clothing, home management, child development and family relations. The model is aimed at (1) introducing motivational appeals for family planning through the aforementioned areas of home economics; and (2) introducing effective teaching methods and educational procedures appropriate to the educational level of the audience and the facilities of the educational settings.
2. To obtain feedback on the usefulness and applicability of the family-planning teaching model, through its evaluation carried out by Colombian and American home economics students and Colombian home economists.
3. To revise the model and introduce the necessary changes suggested in the evaluation.

Background for the Study

Colombia's Demographic Situation

Prior to World War II, Colombia presented a moderate population growth resulting from high birth and death rates. In the late 1940's, the demographic balance slightly changed when mortality rates began declining, due to the introduction of sanitation and immunization campaigns. As the death rates continued to decline, the gap between birth and death rates broadened, resulting in a population explosion. Thus, the crude mortality rate declined from 27.4 per 1,000 in 1951, to 15.0 per 1,000 in 1964; by contrast, crude birthrates remained above 40.0 per 1,000 during the same period (Bravo, 1973).

Major changes in the general fertility rate again occurred between 1964 and the late 1970's when birthrates dropped from 40.0 per 1,000 to 33.03 per 1,000. During the same period of time, the death rates dropped from 15.0 per 1,000 to 7.96 per 1,000 (Naciones Unidas, 1978).

The current trend of low death rates and declining birth rates indicates that Colombia is approaching the third stage of the demographic transition which is characterized by low levels of fertility and mortality (Peterson, 1975).

Differentials in fertility levels. Not all Colombian women in the reproductive age group are bearing children at the same rate. Fertility differentials are related to socioeconomic variables such

as age at marriage, education, place of residence, income level, and occupation. The most recent data on fertility differentials were found in the World Fertility Survey, the largest social research ever undertaken. The study, which began in 1978, gathered data on marital fertility from more than 60 countries all over the world, including Colombia.

Partial data of the study about socioeconomic determinants of marital fertility in 20 selected countries showed significant differences in the fertility levels of Colombian women (Rodriquez & Cleland, 1980). The total fertility rates by place of residence were 6.6 for rural women and 3.5 for urban women. In relation to the educational level, fertility rates were 6.7 for non-educated, 5.9 for lower primary, 4.1 for upper primary, and 3.3 for secondary education.

Occupation of women was jointly explored with education and place of residence. Total fertility rates were 7.8 for the non-employed, low-educated rural woman, and 5.7 for her urban counterpart; 7.0 for the employed, low-educated rural woman, and 4.4 for her urban counterpart; 5.0 for the employed highly educated rural woman, and 2.9 for her urban counterpart.

To summarize, fertility levels are much higher among poorly educated, non-employed rural women than any other group of women. Accordingly, any educational action intended to cause a decline in fertility levels in Colombia must be addressed to this particular group of women, usually in the lowest socioeconomic levels.

Role of Private Institutions on
The Population Movement

Concern for population problems in Colombia during the decade of the 1960's when private physicians perceived overpopulation as a family problem. A substantial increase in the abortion rate, as well as the growing demand for contraceptive services, were the supporting facts indicating that many women were concerned about the control of their own fertility (Bravo, 1974).

Private organizations became the pioneers of the population movement displaying outstanding contributions in the demographic, research, and population education fields, as well as providing family-planning services.

In 1964, the Colombian Association of Medical Schools (ASCOFAME) through its Population Studies Division, became fully involved in the population movement. Activities were mainly directed toward the coordination of teaching, training, and research on population matters. In 1968, ASCOFAME introduced family-planning programs in the university hospitals. Further activities expanded into areas of family life and sex education; thus, in 1971, a national seminar was sponsored by ASCOFAME, followed by a course for university teachers and personnel of the Ministry of Education. Currently, ASCOFAME retains its leadership position in the teaching and research fields, as well as in publishing literature related to population and family planning.

The Colombian Association for Family Welfare (PROFAMILIA), established in 1965 as an affiliate of the International Planned

Parenthood Federation, has played an outstanding role in dealing with population matters. Major tasks of PROFAMILIA have been the implementation of family-planning programs in urban and rural areas, the diffusion of family-planning information through mass media channels, and research projects on the acceptability and effectiveness of contraceptive devices.

In the early 1970's, The Association for the Scientific Study of Population (ACEP) joined the Colombian population movement. This institution is a private, non-profit organization of leaders in medicine, demography, sociology, and related fields. Activities have mainly been focused on education and training of national and international community leaders (Bravo, 1974).

Role of Government

In 1966, the Colombian government first expressed its concern of population matters by signing a contract with ASCOFAME, in which the latter was prompted to initiate family-planning research and training. Further interest was expanded into areas of family life and responsible parenthood. Such concern arose from deficient legislation in which women and children were regarded as second-class citizens. A new law, endorsed by the Congress in 1968, was designed to advocate the rights of women and children, and to determine the means to enforce the law. This new law proclaimed that women and children have the right to receive financial support from husbands and fathers; that illegitimate children have the right to inherit; that parents who abandon or neglect their children are obligated to fulfill their duties; that abused children should be placed in foster homes; and that day-care centers and nursery schools should be

provided for children of working mothers. In addition, the law urged the establishment of the Colombian Institute of Family Welfare as the organism entitled to perform the functions implied in the new law.

In 1969, the government became actively involved in the population movement by officially recognizing the need of facing two major population problems: uncontrolled migration to the largest industrial centers, and rapid population growth. These problems were the major issues of the population policy which in 1970 became a chapter of the plan of economic and social development. The same year, the President of Colombia created the National Population Council with representatives from public, private, and religious sectors, whose main function was to advise the government on population matters (Bravo, 1974).

Statement of the population policy. Colombia's population policy pursues two major goals: to achieve a more equal territorial distribution of population, and to reduce the present rate of population growth.

The first goal deals with the problem of unequal population distribution, a population phenomenon originated by the massive migration from rural to urban areas. Rural migrants, attracted by the illusion of employment in the industrial sector, have tended to settle in the three largest cities. However, the lack of opportunities in the job market, aggravated by housing shortages and inadequate educational and health services, have created the serious social and economic problems so peculiar to overcrowded cities.

The goal of achieving more equal territorial distribution can be reached by promoting more equal and harmonious socioeconomic development in other regions of the country, and thus, obtaining full utilization of human and natural resources.

The second goal deals with the problem of rapid population increase, caused by the imbalance between birth and death rates. Significant reduction in the population growth rate can be attained by decreasing the general fertility rate.

The implementation of the goal dealing with fertility decline requires strong action at both the societal and family levels. At the societal level, action must be directed toward (1) changing socio-cultural values which impede social and economic development; (2) establishing a higher minimum age for marriage; (3) raising the status of women; and (4) enforcing the laws protecting the rights of women and children. At the family level, action must be directed toward (1) raising the educational level of individuals in order to develop more responsibility for parenthood; (2) providing objective information on family life and sex education; and (3) providing medical services, including family planning, to those requesting these types of services (Bravo, 1974).

Position of the Colombian Catholic Church on Population Matters

The Colombian Catholic Church is characterized by its strong influence on matters of governmental concern. The church intervention power is originated in the Concordato, or agreement between the

church and the state, in which the former was entitled to intervene in political and governmental decisions affecting the church. Furthermore, support from the Catholic hierarchy has become a necessary condition for the success of any important public policies.

In the middle 1960's, the Catholic Church first manifested its opposition to birth control, when private physicians expressed the need for family-planning services. Further opposition was expressed in the late 1960's, when the church publicly condemned the agreement between the government and ASCOFAME, in which the latter would be initiating training and research on population matters. With regard to family planning, the Catholic hierarchy manifested through its official newspaper that American dollars were being used by the Colombian government to launch artificial birth control programs.

In 1967, after the declaration of the papal commission on birth control, the Church assessed its acceptance of natural means of contraception, but maintained its opposition to artificial methods of birth control. Once again, the church strongly rejected the anti-natalist campaigns carried out by ASCOFAME and PROFAMILIA.

In 1968, Pope Paulus VI issued the Encyclical Humanae Vitae, in which he condemned any artificial method of birth control. However, in a further visit to Colombia for the International Eucharistic Congress, the Pope declared that his position on the right to life was not a limitation on a "wise freedom" on the part of married couples.

The Pope's statement prompted the Colombian Catholic hierarchy to further define the church's position on family-planning matters.

Thus, in 1969, a document entitled "La Iglesia ante el Cambio" (The Church in the presence of change), issued by a team of laymen and priests and approved by the Colombian Episcopate General Assembly, revealed a significant shift from a strong opposition to a state of openness and understanding toward population problems as they affect the family. Further statements issued by the church in different circumstances pointed out the need to provide family-planning services along with family-life education and sex education.

Church concern on population matters was not limited to recognizing problems or suggesting solutions to problems; on the contrary, the Colombian Episcopate General Assembly created several agencies to pursue the proposals suggested in the documents and pastoral letters. Among them, the Population and Family Office of the Episcopate became the agency which advises the hierarchy, diffuses the modern theology and social sciences, and provides religious advice to private and public organizations concerned with family and population issues (Bravo, 1974).

Current State of Population Programs in Colombia

Colombia was one of the first developing countries to recognize the need for and importance of population education. In 1970, the first seminar on population education was held in Sochagota, sponsored by ASCOFAME, and attended by the Ministry of Education, Colombian Episcopate, schools of education, and other educational institutions. The seminar recommended the creation of an interdisciplinary committee composed of representatives of different

institutions related to the educational sector, which would exert pressure on the government to adopt a policy establishing population education programs.

The objectives of population education recommended by the seminar were stated as follows:

1. To create awareness of the significance of the population phenomena for the individual, the community, and the nation.
2. To contribute to the reorganization of the structure and programs of the educational sector, so that they respond to the present needs of the country.
3. To develop in families a sense of responsibility regarding their own fertility, so that family size does not result from chance or ignorance, and that family members become vital elements of the development of the country. (Studies in Family Planning, 1972, p. 148)

In 1972, the University of Valle Colombia carried out a project tending to integrate population, sex, and ecological education into one package that was responsive to perceived societal needs and politically acceptable. The project underwent experimentation in public and private schools in areas contiguous to the University of Valle. Further efforts included the training of teachers and development of text materials that would be acceptable to the Ministry of Education (Viederman & Wayland, 1973).

Hence, the overall view of the Colombian population movement reveals the most favorable conditions for the diffusion of population education. Any effort in this direction would be likely to succeed with the support of public, private, and religious sectors.

Need for a Family-Planning Education Project

Major attempts at introducing population and family-planning education in the school curriculum have been mainly directed toward formal education programs. Informal education, namely adult literacy and rural extension programs, has been overlooked to a certain extent, even though one of the objectives of population education stated in the first Colombian seminar on population education implied the need of family-planning education for informal audiences (Viederman & Wayland, 1973).

Private institutions engaged in the task of diffusing population education, such as ASCOFAME, PROFAMILIA, and ACEP, have made efforts to introduce population education in informal programs; however, the significance of such programs has been minimal for the following reasons:

1. Population and family-planning education offered through informal education programs reach mainly those programs operating in large cities; rural areas and small urban centers are often neglected by the sponsoring institutions, because of financial constraints and lack of qualified personnel to serve all regions of the country.
2. Population and family-planning education is not yet integrated into the existing curricula of informal education programs; therefore, the former programs lack continuity and regularity as the new programs are offered on temporary bases.

3. The program content of population and family-planning education deals mainly with topics on human sexuality, physiology of reproduction, and contraceptive methods. Subject matter dealing with motivational aspects of family planning, which should precede the teaching of facts on the aforementioned subjects, is barely discussed or not discussed at all.

The current state of population education offered through informal education programs points out the need for a population and family-planning education project which could attempt to ameliorate the aforementioned setbacks of the former programs. The teaching content should be focused on family planning in particular, since informal audiences are generally made up of adults in the reproductive stage of the life cycle and therefore faced with decisions regarding fertility control.

A family-planning teaching model through home economics subjects fulfills the needs in the matter of informal or non-school population education. The following reasons account for the suitability of the project:

1. Family planning through home economics programs can reach a wide range of informal educational programs in both urban and rural areas across the country.
2. Family-planning subject matter is properly integrated into the different areas of home economics. Therefore, there is no need for extra-curricular courses or changes in the existing curriculum.

3. Given the objectives of home economics whose general goal deals with the quality of family life, audiences strongly opposed to changing their reproductive practices might be highly motivated to plan the size of their families in order to attain the desired quality of life.

Definition of Terms

The following terms, defined by Peterson (1975), are included to help understand their meaning in population dynamics.

Rate of natural increase. Yearly net increase in population size due to excess of births over deaths, expressed as a percentage.

Rate of population increase. Yearly net relative increase in population size due to natural increase and net migration, expressed as a percentage.

Crude birth rate. Yearly number of births per thousand population.

Crude death rate. Yearly number of deaths per thousand population.

General fertility rate. Yearly number of live births per thousand women in the reproductive age.

CHAPTER II

REVIEW OF RELATED LITERATURE

Definition of Population Education

Population education experts lack consensus on the definition and conceptualization of population education. In fact, there is no universally accepted definition of population education since a definition should reflect what population experts are doing in certain areas and not be predetermined by specification of what an area of activity should be (Kline, 1976). Every country faces different population problems; therefore, a wide variety of definitions of population education is likely to be encountered.

The following definition is an attempt to define population education in broader terms:

Population education is defined as the process by which the student investigates and explores the nature and meaning of population processes, population characteristics, the causes of population change, and the consequences of these processes, characteristics and changes for himself, his family, his society and the world. (Viederman, 1972, p. 337)

More specifically defined, population education is a process whereby the student learns that individual acts, such as having children or moving from one place to another, have demographic consequences. The student learns that the consequences of these individual acts have social and biological implications for himself, for his family, for the society in which he lives, and for the whole world (Viederman, 1972).

The Asian Regional Workshop on Population and Family Life Education held in Bangkok in 1970, stated a definition that reflected what the workshop would expect to achieve under population education activities:

As an educational program, it is to present clearly to the students the multifaceted aspects of their population situation. By so doing, the assumption implied is that a comprehension of the total picture, will lead the pupils eventually to make more rational decisions concerning their own behavior on population matters. Given world realities, those decisions are expected to be for smaller families. (UNESCO, 1971, p. 13)

Both definitions clearly indicate that population education is not restricted to the study of population growth phenomena; on the contrary, a vast array of population events integrate the scope of population education. Nevertheless, the latter definition underlines the need to emphasize fertility control by advocating the small family norm. Even though the definitions of population education may differ in detail or emphasis, there are certain common elements in most of them. Viederman and Wayland (1973) summarized them as follows:

1. The focus is on an understanding of the relationship between population dynamics and the quality of life both for the individual and the society.
2. Attention is directed to the individual, the family, the community, the nation and the whole world.
3. The purpose is education, not indoctrination or propaganda.
4. The focus is on the cognitive and affective domains; a concern for knowledge and the learning of skills, as well as the exploration of values and attitudes.

5. The content is multidisciplinary or interdisciplinary, drawing on concepts and data from many subject areas.
6. The selection of the content and data is determined by the specific goals and objectives of the program.
7. Concern is expressed for the whole range of population factors, in spite of the popular focus on rapid population growth.
8. Concern for rational and responsible behavior and attitudes is defined in terms of developing an understanding of the consequences of the individual's own behavior for himself and for the society.
9. The goal is often defined as motivating students when they reach adulthood, to take advantage of the advances in fertility control, and to make family planning a way of life.
10. Particular attention is directed to the student's own milieu--his village, his city, his state or nation.
11. Population education is recognized as complementary to school programs for out-of-school youths and adults. (p. 340).

Goals and Objectives of Population Education

The ultimate goal of population education has become a controversial issue. The major concern has been whether population education ought to seek a specific fertility behavior on the part of the students, especially the practice of contraception to limit the family size. Guttmacher (1966), Dikastra (1968), and Slesnick (1970) maintained that the goal of population education should seek to promote changes in couples' fertility behavior. As Dikastra (1968) stated, "Effective education is that which induces couples to have no more than two children, which most must settle for if population growth is to be halted" (p. 94).

The opposite position, supported by Viederman (1972, 1974) and Massiola (1972), maintained that the goal of population education should seek to educate individuals for rational decision making on population-related behavior. As Viederman (1974) expressed, "The goal of such an educational process is to produce people who, by virtue of their having gained population literacy, will be able to be responsible population actors" (p. 318).

The former position implied a one-sided approach to the problem, since the goal of population education seeks to obtain changes in the couple's fertility behavior. The latter position suggested an open-ended approach since the student is not expected to adopt the small-family norm; on the contrary, he is furnished with the knowledge and understanding necessary to make responsible decisions with regard to population-related behavior. Obviously, the latter position fulfills the aim of the educational process in that it presents factual information about an issue without indoctrinating the student with a particular view. As Viederman (1974) stated, the purpose is education, not indoctrination or propaganda.

The open-ended approach may not have a positive effect on the students' later reproductive behavior. Kline, Middleton, and Perelman (1976) indicated that the extent of open-endedness may be ineffective since the student may not take the problem seriously, or may take a pronatalist position. They suggested an approach called the "social influence approach," which included both education and persuasion. The approach presents the pros and cons of an issue, but weighs the message in favor of the desired behavior.

The controversy will continue, and the side the educator takes will depend on how serious the students believe the population crisis to be, and partly on their philosophy of education (Population Bulletin, 1970, No. 3).

The ongoing debate is mainly centered on the goals and objectives of school population education. As for non-school population education, educators agree more often that the purpose is to bring about some behavioral outcome rather than to inform or instruct about the problems of population growth. Kline and Keehn (1973) maintained that the purpose of non-school education is to lead people to take some action that will resolve their problems. To attain behavioral outcomes, it is necessary to utilize educational approaches that include persuasion or reinforcement techniques. Thus, if the purpose of non-school population education is to inform, persuade, and reinforce, objectives should be stated in terms of (1) informing members of target groups about population problems, (2) persuading them to consider and choose among alternative solutions, and (3) reinforcing attitudes and behaviors that aid in solving the population problem (Kline, 1976).

Kline and Keehn (1973) suggested a framework for specifying objectives:

Objectives should be stated in terms of a hierarchy ranging from long term to short term objectives. Each lower order objective is a precondition of a higher order one. For non-school population education these objectives can range from a short term objective of informing a group of people about a specific aspect of a population problem, to a longer range objective of getting people to decide to take some action,

such as limiting the size of their family, to an ultimate goal of reducing population growth or redistribution of population. (p. 112)

Specific objectives can be set only after determining what is needed and desired by the target group. It usually means conducting research and analysis at the beginning of planning to determine the audience's perception of the problem, and what the audience wants to do about the problem (Kline, 1976).

Target Groups of Population Education

Women in the reproductive age are likely to be chosen as the target group of non-school population education programs. Indeed, women in the childbearing stage of the life cycle are faced with decisions regarding the size of the family; therefore, any effort attempting to modify fertility behavior should be directed at this particular age group. This tendency is logical, but population programs should not be limited to women in the reproductive age. Other specific age groups also should be considered as potential target groups for population education.

Kline, Middleton, and Perelman (1976) identified three basic categories of target groups, and within these three categories, ten individual groups for population and family-planning education programs:

I. Reproductive age (men, 15-80; women, 15-45)

1. Adolescents
2. Single adults
3. Young couples (< 30)
4. Older couples (30-45)

II. Non-reproductive age

1. Preschool age
2. Primary school age
3. Secondary school age
4. Post-reproductive age

III. Special groups

1. Leaders and authorities
2. Professional personnel involved in population programs.

All the groups classified in the reproductive age category are the main target audiences of non-school population and family-planning education programs. The adolescent group may be covered by either school or non-school population education programs.

The most neglected group within the reproductive age category is perhaps the male population, even though in most societies, males have a dominant role in the husband-wife relationship, and must consent to any change in the couple's fertility behavior. Bogue (1967) listed some of the reasons for involving males in population education:

1. Men usually earn the living in families and are therefore not only aware of the economic implications of additional children, but are also the ones who tend to lose prestige in the community if the children cannot be supported.
2. Men generally have a higher literacy rate and are therefore easier to reach with written communication.
3. Men are generally less inhibited over matters dealing with sex, reproduction, and contraception, and are therefore easier to reach with information pertaining to population education. (p. 140)

Likewise, the male's preference for a large family might be challenged through family-planning education. The National Fertility Survey conducted in Colombia in 1969 (ASCOFAME, 1972), found that

males have greater preference for large families than do females. Males as well as females perceive both advantages and disadvantages in the large and small family (Heredia, 1974). Ambivalent preferences might work in favor of the small-family norm since, through the educational process, the educator could stress the advantages and undermine the disadvantages of the small family and vice versa.

Young couples should form a particular target group within the general reproductive age category. In most countries, couples under the age of 30 maintain the highest birth rates, and if they adopt contraceptive practices, the changes are for lower birth rates in this specific age group. The possibility of changing the reproductive behavior of young couples is enhanced by the fact that young people are more open to new ideas, and are susceptible to change (Kline et al., 1976).

The target groups within the three large categories can be broken into smaller and more homogeneous groups. Kline et al. (1976) suggested several variables that may serve to define specific target groups. They include age, sex, marital status, educational level, socioeconomic status, family factors, socio-cultural factors, health factors, and place of residence.

Once the target group has been specified, it should be described in terms of its needs, expectations, and characteristics. The description should include those factors that might prevent people from adopting the desired behavior, as well as the stage of the target group in the process of attitude and behavioral change (Kline et al., 1976).

In relation to the place of residence, the rural adult population is regarded as a very important target group. Harman (1976) maintained that any attempt to introduce changes in the rural population must start with the adult group. He supported his assumption on several grounds: (1) the authoritarian pattern prevalent in the parent-child relationship; (2) the rural population's peculiar resistance to change; and (3) the fatalistic approach to life. In this environment, formal schooling cannot effectively introduce changes. The combined action of these three factors stops any attempt in the direction of change initiated by young members of the community. Furthermore, an educational intervention addressed to younger groups could be successful only after adults have accepted the proposed changes.

The Content of Population Education

The overall content from which the subject matter of population education should be derived covers the following topics: (1) information on the population situation such as size, growth, migration, distribution, composition, and trends; (2) the relationship between population and the quality of life now and in the future, with regard to such topics as food, health, education, employment, urbanization, the environment, socioeconomic development, the political system, and family life; and (3) human reproduction with emphasis on physiology, sexuality, and family planning. The learning process would also include the exploration of values and attitudes as they relate to these content areas (Viederman, 1974).

The content of most population programs, especially those addressed to non-school audiences of less developed countries, deals with population size and growth issues. Kline and MacCann (1976) identified three content areas of great relevance to the educational programs dealing with population size and growth problems: (1) demographic and socioeconomic factors related to population; (2) human sexuality and reproduction; and (3) factors affecting the overall well-being of the family that are also related to population size and growth.

The first area deals with population awareness facts. They can be conceptualized either at the microlevel (the individual, the family, and the community), or at the macrolevel (regions within countries, countries, and the whole world). Population awareness education is more widely diffused in Asian countries than in Latin American and African countries, because of the high incidence of population programs in Asia, as well as the widespread practice of population control. On the other hand, the teaching of human sexuality and reproduction is more acceptable in some Latin American and African countries than population awareness courses. The reason lies in the apprehension toward population education programs regarded by many as American intervention to halt the population growth of poor nations. The third area, generally labeled family life education, deals with several factors such as health, education, economic well-being, food, and nutrition as they relate to the family. Its purpose is to instruct people about the role of each of

these factors in the well-being of the family, and to assist family members in related problems (Kline & MacCann, 1976). Theoretically, it is possible to separate sex, contraception, and family life topics from the general content of population programs, but experience has shown that it is difficult to deal with such topics separately (Population Bulletin, 1970, No. 3). Furthermore, it is likely that a discussion centered on population size and growth will eventually encourage a discussion on reproduction and contraception; as Hauser (1966) noted, these issues cannot be avoided for the students will ask these questions themselves. Kline and MacCann (1976) indicated that all three content areas are probably necessary if education is to deal effectively with population size and growth problems; however, given the needs and concerns of non-school audiences, usually made up of adults in the reproductive age, the second and third areas might provide the appropriate subject matter of non-school population programs.

Microlevel and Macrolevel Approaches

As mentioned above, population concept can be conceptualized either at the microlevel (the individual, the family, and the community), or the macrolevel (the country and the world).

The initial population programs were focused on demographic and statistical information about population size and growth defined at the national and worldwide levels. Such information did little to convince people of the personal significance of population issues. Currently, population educators have stressed the importance of presenting information more related to the individual and the family (Kline & MacCann, 1976).

Several population experts (Kline, 1976; Kline & MacCann, 1976; Salyer, 1972) have advocated the need to conceptualize population education at both levels. Under the macrolevel and microlevel frameworks, the causes and consequences of population change, as well as the relationship across social levels, are dealt with at different social levels. For example, the relation between family size and family economic status is a topic for microlevel population education, while the relation between population growth and the economic status of a nation is concerned with macrolevel population education (Middleton, 1976). On the other hand, some experts argue that a macrolevel approach has no significant impact on an individual's reproductive behavior. Polman and Rao (1974) found evidence that people do not plan individual family size for the national good. Similarly, Tabbarah (1976) maintained that the consequences of reproductive behavior and how it affects the nation and the world are irrelevant among poor people, whose daily survival is their main struggle in life. The author's remark seemed to indicate that a macrolevel approach might be irrelevant when addressed to uneducated, low-socioeconomic level, adult audiences. To settle the arguments, Middleton (1976) proposed a mediating position recommending that macrolevel contents be addressed to school audiences, and microlevel contents to non-school audiences. The former is suitable to the school curriculum since macrolevel population is remote, abstract, and invisible. The latter deals with issues and concerns which are an integral part of the non-school learning environment. In fact, the consequences of population change at the village level are

closely tied up with the struggle for daily survival, such as availability of food and water, the health of the family, security in old age--to mention only a few problems. The role of population change in determining the nature and scope of these problems may or may not be well understood, but at least people have the potential to perceive and discuss the problems that affect their daily lives.

The Learning Strategy of Population Education

The learning strategy of population education refers to the appropriate selection of the educational approach and the instructional methodology to reach effectively the objectives set for the target group.

A thorough description of the instructional methods and teaching aids is highly desirable in the development of curricula for non-school population programs of less developed countries. In fact, unqualified or poorly qualified personnel need to be furnished with teaching methods and techniques that can help them to encourage learning and to foster behavioral change (Kline & MacCann, 1976).

Educational Approach

The types of educational approaches to be used in the pursuit of the educational objectives range from information to reinforcement approaches. Their selection depends on whether the educator seeks to inform students about a population problem, or to attain a behavioral outcome. Kline and Keehn (1976) and Kline et al. (1976) described the educational approaches suitable for population and family-planning education.

1. Information approach. The information approach refers to the transmission of facts, ideas, and concepts about the population problem, and its possible causes, effects and solutions. The information can be transmitted by any means, and no attempt is made to influence the person's reaction to information.
2. Instructional approach. The instructional approach presents the educator in a reciprocal relationship with the learner, presenting information, receiving it, and interpreting it in the classroom or in a discussion group. The learner is expected to understand all aspects of the problem.
3. Persuasive approach. The persuasive approach refers to the use of logical argument, demonstration, simulation, analogy, or incentives to convince a person of the importance of a problem and the need for him to take actions that have a probability of solving the problem; for example, selection of a family with few children and high standard of living to demonstrate the advantages of family planning.
4. Reinforcement approach. In the reinforcement approach, the behavioral outcome expected in the learner is reinforced or rewarded. (pp. 105-109)

The information approach, widely used by mass means of communication, plays an important role in creating awareness of the population problem. The main advantage of this approach lies in its wide coverage of large segments of population. Conversely, the educational content diffused through the instructional approach may reach only specific groups under school or non-school programs. Yet, the instructional approach is better suited to the objectives of school population education. Under the label "population awareness courses," subject matter is taught to children, still remote in time and place from a situation where a behavioral outcome is likely. For example, the information is offered to create knowledge that there is a problem of rapid population growth, and that some solutions should

be explored and analyzed. Ultimately, there should be a transfer of this knowledge to the family or individual situation where decisions related to reproductive behavior will result in reduced family size (Davis, 1976).

The persuasion approach, along with the reinforcement approach, is the best means of reaching the objectives of non-school population education. Of course, the information and instruction approaches are implicit in the attainment of non-school population education objectives as well. The significance of the four approaches in non-school population education is evident in the following definition:

Non-school population education uses the range of educationally oriented organizations other than schools to inform, instruct, and persuade people about the nature and consequences of population size, growth, composition, distribution, and related problems, and the possible solutions to these problems. Through incentives, reinforcement and assistance, non-school population education helps individuals and groups to try out and adopt a solution, or to develop their own unique solution to the problem. (Kline & Keehn, 1973, p. 105)

The definition of non-school population education clearly indicates that non-school programs go beyond the objectives of informing and instructing; they seek to promote behavioral changes by persuading and reinforcing the desired population-related behavior.

Use of Motivational Appeals For Family Planning

Population programs of less developed countries are mainly focused on the problem originated in the rapid growth of population. The ultimate goal of population programs is, therefore, to seek changes in the reproductive behavior of those individuals with high

fertility rates. By promoting the small-family norm, individuals are persuaded to adopt family planning as a way of life.

Family planning cannot be adopted as a regular practice unless couples feel strongly motivated to plan the size of the family. However, there is evidence that poor people, who usually represent the highest birth rates, do feel the need to have small families. Kar (1974) indicated that a motivational approach to family-planning education might not be necessary since KAP studies (Knowledge of, Attitudes toward, and Practice of Family Planning), conducted in less developed countries, have shown that families' ideal family size is smaller than the real one. He further recommended a strategy aimed at removing all the barriers that interfere with the couple's desire to engage in contraceptive practices. Of course, Kar's position cannot be underestimated; on the other hand, population educators recognize the need to deal with all the negative reinforcement contingencies that discourage couples from having small families. Yet, motivations and incentives are necessary since the reasons for wanting smaller families are not powerful enough to foster radical changes in the couple's fertility behavior. The Latin American Center of Demography, CELADE (1972), carried out a fertility study of women in the six largest cities of Latin America. Data showed that women perceive family planning more as a remedy against the hardships imposed by a large family, rather than as something to be used constructively to attain greater happiness and fullness of life. The Colombian National Fertility Survey, ASCOFAME (1972), reported similar results.

Lack of motivation to have small families might stem from socio-cultural and personal factors such as machoism, glorification of motherhood, religion, fatalism, apathy, low achievement motivation, and poor marital relationships. All these considerations strongly support an approach to family-planning education based on motivation or incentives to achieve the small-family norm.

The aim of the motivational approach is to convince people that having large families is an obstacle to the satisfaction of personal needs. The educator's role would be to undermine the motives for having large families (Zawaky, 1971).

Bogue (1967) suggested how to approach subjects in a motivational appeal approach by saying:

Try to arouse within a person an awareness or desire to satisfy some needs, to achieve some goals, or to avoid some unpleasant situation, and then, to suggest that these needs, goals, or avoidance of disagreeable situation can be satisfied by the adoption of family planning.
(p. 59)

In other words, an attempt is made to persuade couples that family planning will bring benefits they would like to possess.

Bogue (1967) classified the motivational appeals that might be used in family-planning education as follows:

1. Health. Preserve the health of the mother and child.
2. Economics. Gain a high standard of living; permit savings for future retirement; avoid subdividing the property among many children.
3. Family welfare. Provide children with education, happier family life, more companionship, fewer tensions.

4. Better rearing of children. Gain more time to devote to each child, more opportunity for individual expression; avoid overcrowding the house.
5. Marriage adjustment. Provide husbands and wives with more leisure time, opportunity to enjoy each other's company; improve sexual adjustment by eliminating fear of unwanted pregnancies; avoid danger of childbearing when parents are old.
6. Individual welfare. Permit either husband or wife or both to pursue educational and occupational objectives; permit a talented wife to express herself outside the home; permit wife to have contacts and friendship outside the home.
7. Community and national welfare. Help avoid overpopulation and overcrowding; help communities to meet demands for education other than community services; help nations with economic development. (p. 61)

Some appeals might have more persuasive power than others; hence, the educator should carefully select those appeals that have deep emotional meaning to the audience and are relevant to the socio-cultural context. Schraman (1970) identified some appeals that have been effective in family-planning programs. Among those, the health theme, happy families, and education of children are highly effective on women, while education and the economic betterment of the family are appealing to men. The theme of sex without fear appeals mainly to young couples. The health theme in particular is a very appealing motive. Omram (1971) assigned a unique role to the health theme by stating that the acceptance of family planning may increase by interesting couples in their own health and the health and development of their children. This approach might especially be a challenge in places where the masses of people are not interested in planning their families for the welfare of the country. In short, appeals

connected with personal and family betterment are more effective than those dealing with national and worldwide benefits.

The use of threat has little effect on motivating persons to accept a new idea; on the contrary, it may increase their resistance. When the negative consequences on non-adoption of family planning are presented, they should be accompanied by discussion of the positive rewards to be gained from adoption (Bogue, 1967).

Teaching Methods and Materials

Kline (1976) defined "methods" as the instructional procedures used to communicate the message to the audience, and "materials" as the typical devices used to assist in the transmission of the message.

Modern teaching methods are very effective in promoting learning. The rationale lies in the application of the learning principles underlined by modern psychologists:

1. We tend to remember pleasant events and experiences better than unpleasant ones.
2. The greater our involvement in the learning process, the more we learn.
3. We take more responsibility for our own development in a democratic classroom than in one with authoritarian control. (p. 83).

These learning principles suggest that teaching methods should allow the student a more active participation in the learning process, while the teacher is relegated to the role of stimulator or resource person.

A variety of teaching methods and materials could be used to accelerate the learning process. Thus, the students can learn

individually and in groups; they learn from ideas, real objects, audiovisual media, reading, listening, projects, and activities. Variety helps students maintain interest and provides for individual differences. If the students have the opportunity to explore, inquire, analyze, create, and react, they will develop initiative, independence, self-direction, self-confidence, and leadership as they find themselves in situations demanding these qualities (Hall & Paolucci, 1970).

The selection of the appropriate method for population and family-planning education is primarily a function of the level of the target group in the behavioral change process. The manner in which the content is presented to the audience differs depending on whether or not the group requires knowledge, motivation, or assistance in decision making. Thus, audiences in the information stage could be reached through face-to-face discussions, lectures, printed and audiovisual materials, and programmed or computer-assisted instructions. These audiences are generally the target groups of school population education. Audiences in the motivational stage could be reached through appropriate arguments and appeal to authority such as face-to-face discussion, role playing, demonstrations, simulation-gaming, programmed or computer-assisted instruction. Similar methods might be used to approach learners in the decision-making stage (Kline et al., 1976).

Once the educator has decided upon the method for accomplishing the objectives of the program, he proceeds to select the proper teaching aids or materials that will help him to deliver the message.

They range from audiovisual aids and printed word materials that may be designed by the educators themselves, to more sophisticated materials such as films, filmstrips, and slides.

Some of the methods and materials appropriate for population and family-planning education will be discussed briefly.

Face-to-face discussion. The purpose of discussion is to encourage the exchange of ideas without attempting to reach a decision. Discussion methods are more effective than lectures because of their potential for contributing to the application of the material learned, and for building attitudes that are important in shaping behavior patterns (Hall & Paolucci, 1970).

Demonstration. Demonstrations are commonly used to teach skills and other aspects of a problem that might be difficult to explain with words alone. Demonstrations are one of the best methods to motivate or persuade since the learner can perceive the results of the tasks being demonstrated. Chamberlain (1975) regarded demonstrations as the best means of promoting optimum learning experiences for they can be used to show procedures, to explain new techniques, and to establish standards for individual and group work. To increase the learning potential of demonstrations, a teacher should seek the involvement of the students in the demonstration procedures, or allow the students themselves to give demonstrations (Hall & Paolucci, 1970).

Role playing. Role playing is a dramatization of a situation in which students impersonate people in various situations. The action comes from the student's creative use of his feelings and imagination.

This is an excellent means of exposing emotional problems without self-consciousness (Teacher's Guide for Population Education, 1975).

Simulation-gaming. Simulation-gaming, widely used in population education, is one of several techniques that have evolved to bridge the gap between the conceptual level and the real life situation. Simulation is a structured situation in which participants play roles, but the teaching focus is shifted away from interpersonal interaction toward the issues and processes involved in the simulation, and toward consideration of factors such as power, communication, and persuasion (Finseth, 1976).

Simulation-gaming techniques help students to find pleasure in learning and thereby serve as a means of motivation. Spitze (1972) explored the learning principles implied in simulation-gaming techniques.

1. If a learning situation is part of real life, or seems real, the learner will perceive the relevance and be more eager to learn.
2. If the learner is an active participant, his interest is likely to increase.
3. If the learner is mentally and emotionally involved in the learning situation, motivation and learning are increased.
4. If the chosen techniques help the student to experience success, his self-esteem and motivation will be enhanced.
5. If he finds pleasure in learning, he will continue learning.
6. If the student sees usefulness in his learning activities, motivation will be increased.

7. If the learner himself discovers an intellectual relationship, he experiences greater joy in learning and greater interest in continuing to learn. (pp. 8-12)

Individualized instruction. Individualized instruction is a suitable approach for non-school classrooms. The student is responsible for selecting, planning, and carrying out his or her own learning experiences and thus becoming a self-directed learner. Chamberlain (1975) pointed out that motivation and learning increase when the students have the opportunity to plan and select their own learning experiences. Likewise, when students experience success, their motivation and learning are affected positively.

Teaching aids. Teaching aids are the instruments required to foster learning in the students, and to make the learning experiences more innovative and realistic (Hall & Paolucci, 1970). Teaching aids or audiovisuals are used with most teaching methods. By using teaching aids properly, the teacher can motivate students, clarify information, present new ideas, give concrete expression to abstract ideas, stimulate discussion, and challenge independent thinking (Hall & Paolucci, 1970).

Audiovisuals are mainly used in the form of displays such as bulletin boards, flannel boards, flipcharts, exhibits, posters, and slides. Filmstrips, slide projectors, and the opaque projector are more sophisticated but rather expensive audiovisual tools.

Written materials. Written materials are very efficient when they are addressed to literate audiences. Bogue and Heisnaken (1963) pointed out that in writing materials, attention should be given to the level of the intended audience, e.g., age, sex, and

socioeconomic status. It is important to gear the language level to the educational level of the audience. The lower the educational level of the audience, the more care should be exercised in preparing written materials. In fact, such audiences read slowly, have very limited vocabulary, and are not accustomed to following a line of reasoning. Therefore, written communication for such audiences should be short, and contain only the messages that are essential. Written messages should be very simple, with large and attractive print, and generously illustrated with drawings or pictures.

Role of Home Economics in Population and
Family-Planning Education

The American Home Economics Association defined home economics as:

The field of knowledge and service primarily concerned with strengthening family life through:

- educating the individual for family living
- improving the services and goods used by families
- conducting research to discover the changing needs of individuals and families and the means to satisfy those needs
- furthering community, national, and world conditions favorable to family living. (Hall & Paolucci, 1970, p. 161)

In other words, home economics is concerned with the best use of familial and extrafamilial resources to improve the family's quality of life. Major problems of deteriorating quality of life stem from decreasing resources used by an increasing number of the world's people; therefore, the use of family resources cannot be isolated from the effects of population growth (Wallace, 1974).

The relationship between quality of life and population growth underlines the unique role that home economics might play in population and family-planning education. In fact, home economics itself is family planning since the role of home economics deals with teaching families about how to educate children, how to feed them, how to manage family resources, how to provide for clothing and shelter, and the interrelationship of all these tasks with family size (AHEA, 1972).

The role of home economics in population and family-planning education was the theme of the International Family Planning Conference held in Chapel Hill, North Carolina, in 1972. Participants from different countries explored the different ways in which home economics might contribute to the field of population and family-planning education. The areas explored were the following:

1. Communication. Home economics can reach people through personal contact, group settings, and mass media.
2. Research. Research in family-planning and population education is concerned with (a) identification of needs of intended audiences, program development, and evaluation; (b) the process and consequences of family adaptation to social change.
3. Curriculum development. Incorporation of family planning and population concepts in home economics curricula.
4. Cooperation with other agencies. Development of a macroscopic approach to population education. (p. 58)

The Conference further suggested some of the ways in which home economics can support family-planning efforts around the world.

1. Determine and evaluate the current status of home economics participation in family-planning programs,

as a factual basis to give directions to home economics involvement in family planning.

2. Develop teaching materials for different learning levels as essential components of the home economics programs.
3. Incorporate population and family-planning education in the preparation of paraprofessionals and professional home economists.
4. Develop family-planning programs to reach all segments of the population, and take definite steps to include those termed audiences.
5. Establish international regional research and training centers to deal with family planning in the total context of home economics. Such centers would provide up-to-date and relevant facts and information to help home economists in their work in family-planning programs.
6. Publish international home economics newsletter emphasizing program approaches to family planning. (p. 59)

Socio-cultural Factors Affecting Fertility Behavior

There is a widespread belief that the high fertility rates of less developed countries are caused by either the family desire for a large family, or the family indifference to the number of children they might have.

The general causes of high fertility are more complex; in fact, researchers have investigated a wide range of socio-cultural factors and psychological motives that explain the behavior of high fertility populations. The underlying factors affecting fertility rates stand as barriers to the diffusion of family-planning programs in less developed nations. Some of the socio-cultural factors relevant to the Latin America context are briefly discussed in the following paragraphs.

Cultural Values, Beliefs, and Expectations

Fertility studies carried out in Latin America have shown that certain cultural values, beliefs, and expectations highly favor families with large numbers of children. Stycos (1955) found among lower-class Puerto Ricans several beliefs and expectations that account for a large family ideal, even though families expressed the fact that they would prefer to have smaller families. Stycos classified the beliefs and expectations in three broad categories:

1. The expectation that children will be of assistance to their aging parents. Parents still think that children are investments in terms of financial assistance and emotional support in their old age.
2. The expectation of the wife's immediate impregnation following marriage. This is perhaps one of the major accomplishments in the male's life; the sooner he becomes the father of a child, the sooner his prestige goes up in the community. Being able to procreate is the best way a man can prove his virility.
3. The tendency on the part of the male to identify a large family with virility.

The last statement implies the alleged relation between machismo and high fertility. This relation was first formulated by Stycos (1952), who based his assumption on readings and direct observation of lower-class Puerto Ricans; however, Stycos (1955) and Hill et al. (1959) found little support for Stycos' former assumption. Instead,

Stycos (1955) formulated four possible indirect consequences of the machismo trait on fertility: (1) the anxiety to prove virility encourages a rapid first birth; (2) the anxiety over production of a male offspring to prove that one can make males may encourage higher fertility when female offsprings occur earlier in birth order; (3) serial marriage and extramarital activity may be partly products of a need to demonstrate sexual power; and (4) certain negative attitudes toward birth control seem to be related to virility (p. 246).

Similar behaviors to prove virility are very widespread among Colombians. Gutierrez de Pineda (1968) ascribed specific expectations and behaviors to specific Colombian regions and segments of society. Thus, the need to bear an offspring to disprove sterility is commonly found in the coastal regions; the need to bear an offspring to continue the family name is peculiar of the Santaderes region; and the need to engage in consensual unions or serial marriage is typical of the lower-class subculture across the country. Such behaviors, as Stycos stated, do not seek to bear an unlimited number of children, but may contribute indirectly to increase the family size.

Values and beliefs encouraging large families are likely to change with changes in the social and economic structure of a country. Therefore, the underlying reasons for large families may disappear once the family standard of living is raised and the state provides social security in the old age.

Marital Relationships

Marital relationships in the lower-class subculture are characterized by male dominance and double standard of sexual morality. Male dominance implies inequality in the husband-wife relationship; couples do not share common activities; the husband is the head of the family and the wife and children are subjugated to his will (Rainwater, 1964). A pattern of marital separateness emerges in this type of relationship with a detriment to effective communication between husband and wife.

Communication between spouses regarding such matters as family size and contraception is poorly accomplished or non-existent in the lower-class family. Hill et al. (1959) found that among lower-class Puerto Ricans the majority of husbands and wives did not remember having discussed the number of children they would have like to have before the first child was born. Barriers to marital communication were respect for the husband and modesty of the wife. Statements such as "I never discuss such things with my husband; I feel too much respect for him" were common expressions of wives. The authors concluded that status differences between husbands and wives, taboos in the discussion of sex, and modesty of the wife explain the lack of consensus on matters such as family size, mutuality in sex relations, and acceptance of family planning.

The Colombian Fertility Survey carried out over a nationwide male sample (ASCOFAME, 1974) reported similar findings in relation to communication between spouses regarding family structure. Forty-three percent of the males reported having discussed the number of

children the spouses would like to have; 35 percent declared that they have never discussed the subject with their wives. The authors indicated that the male desire to receive information on contraceptive methods is impaired by deficient communication patterns between husband and wife.

Religion

It is commonly believed that the Roman Catholic Church opposition to the use of artificial means of contraception, expressed in Pope Paulus VI's encyclical Humanae Vitae, is the main religious obstacle to the diffusion of family planning in Latin America. The Catholic church position is reinforced by the Latin American branch of the church which is characterized by its conservatism and manipulation of believers (Saunders, 1970).

Fertility surveys conducted in Latin America have failed to support the so-called Catholic church influence on matters of family size and fertility control. Hill et al. (1959) found that, among lower-class Puerto Ricans, despite the fact that 80 percent of the population was regarded as Catholic, attitudes and behavior were favorable to the small family achieved by non-approved methods of contraception. The attitudes and behavior of those who frequently attended religious services were in the direction of rational achievement of small-family goals. No significant differences between Catholics and non-Catholics were found.

Stycos (1970) referred to a study conducted in 1963-1964 by CELADE (Centro Latino Americano de Demografia), and Cornell

International Population Program. The study dealt with the knowledge, attitudes, and practices related to family planning of women from seven Latin American cities. The variable of religion was explored to determine its influence on fertility behavior. Data showed differences in opinion about the ideal family size, ranging from 2.4 for Catholic married women from Rio de Janeiro, to 4.1 for their Mexican counterparts. Better educated women with a high degree of commitment to religion practices from Bogata, Lima, Rio de Janeiro, and San Salvador reported larger family size ideals than their less educated counterparts from the same cities. Likewise, only a small proportion of better educated and highly devoted Catholics reported the use of mechanical and chemical methods of contraception. Even though studies have shown that the more educated the women the more liberal their attitudes toward fertility control, it appears that those with a high degree of religious commitment are more likely to accept the norms prescribed by the church. Nevertheless, the study failed to show a positive correlation between high fertility and religiosity, as well as significant differences between Catholics and non-Catholics in matters of fertility control. Stycos (1969) concluded that if Catholicism is not influencing fertility behavior in Latin America, it is due to the fact that the average woman does not strictly adhere to the moral standards of the Catholic church.

The National Fertility Survey carried out in Colombia in 1969 reported similar results with regard to the impact of religious beliefs on attitudes toward the use of contraception. Data on urban women showed no significant differences between high- and low-devout

Catholics; only 50 percent to 57 percent of high-devout women, and 60 percent to 67 percent of low-devout women had practiced any scientific method of contraception. On the other hand, the Catholic church teachings were found to influence the attitudes and practices of rural Colombian women. The mentioned study explored the motivating factors underlying the non-adoption of family-planning practices in this particular group. Reasons for non-adoptive behavior were ranked in the following order: (1) religious beliefs, (2) health reasons, and (3) familial reasons (ASCOFAME, 1973).

It is debatable whether religious teachings exert any influence upon the attitudes and practices regarding contraception of rural people. The Colombian peasant, like his Latin American counterpart, adheres to a type of marginal Catholicism that does not interfere with the free performance of behaviors condemned by the church (Fals Borda, 1955). A logical explanation could be found in the fatalistic attitude toward life so peculiar of Colombian peasants. In fact, the origin of fatalism can be traced back to the period of the "conquista" when one of the functions of the church was to maintain the Indian population in a subservient position by means of inculcating feelings of resignation and acceptance of life events as God's will, and promising rewards in the afterlife (Gutierrez de Pineda, 1968). Therefore, Catholic church teachings have an indirect influence on people's attitudes and behavior with regard to the acceptance and adoption of fertility control; it is not the people's adherence to Catholic church norms, but the passive and fatalistic thinking fostered by Catholic preachings that interfere with the acceptance of fertility control.

Fatalism

Fatalism is a widespread trait among the lower-class subculture of less developed countries. Rogers (1969) defined fatalism as the degree to which an individual perceives a lack of ability to control his future. Thus, people believe that events of their lives are determined by fate or supernatural power. The use of supernatural factors to explain frustration and failure eventually leads to the establishment of limited expectations.

Fatalistic individuals believe that family size is an event they cannot control. Hill et al. (1969) and Stycos (1968) found that, among lower-class Puerto Ricans and Haitians, a fatalistic thinking regarding the size of the family was prevalent. Men and women expressed their views with respect to family size with statements such as "where one eats so can many," "for every mouth God provides a pair of hands," and "one must accept whatever number of children God sends." Stycos (1968) indicated that among Haitians, respondents showed no interest in family-planning matters; some respondents had some knowledge, but were contaminated by ideas of black magic and evil motives.

Fatalistic beliefs are widespread among Colombian peasants. Rogers (1965) described the typical Colombian peasant as fatalistic in his outlook of life and low in achievement motivation. "Thus, if a Colombian infant died, a Colombian peasant would say it was his destiny not to grow up." Concepts of ideal family size are saturated by fatalistic thinking as well. Statements such as "I want the

number of children God wants me to have" is a stereotyped answer to the question "how many child would you like to have," frequently asked in fertility studies (ASCOFAME, 1972).

Statements concerning the ideal family size indicate that the fatalistic individual's attitudes toward self-control and future events are dominated by apathy, passivity, pessimism, and submission. Those individuals are difficult to approach with behavioral change programs since they believe they have no power to control their lives, and are therefore willing to accept their lot in life rather than to engage in behaviors aimed at improving their standard of living.

Relevance of Moral Education in Population

And Family-Planning Education

The teaching of population and family planning is not limited to the mere transmission of factual data on demography, reproduction, contraception, and seemingly related matters. It is also concerned with the development of values and attitudes to appraise solutions to a problem, as well as to lead individuals to take some final action.

Curriculum designers face the task of developing curricula in population and family planning and to teach them so as to link initial learning with eventual attitudes and practices. Thus, information is presented and structured so that the learner perceives that there is a problem, that he can do something about the problem, and that he should do something about the problem (Davis, 1976). This is a long-term process especially when dealing with school-age children;

young pupils are primarily exposed to factual information, but final action will be taken later in life as they are faced with real life situations. Final action results from the individual firm conviction that he should do something about the problem; furthermore, the curriculum planner faces the problem of handling ethical and moral issues. This observation suggests the need to deal with moral education, a component that has had brief attention to date in population education. As Davis (1976) stated, without dealing with moral education explicitly, population education becomes nothing more than the transmission of facts and generalizations that the average individual can live without knowing.

The concept of moral development adopted here is drawn from Kohlberg's theory of moral development. Kohlberg (1970) conceived the child as a rational being whose mental capacities are actively used to make sense of the world in which he lives. The moral development of the child goes through sequential stages. Kohlberg described the process as follows:

Those continuing attempts to apprehend reality form a sequence of cognitive stages each of which has a logic structure of its own and provides a way of understanding the world he lives in and his capacity to deal with it becomes increasingly complex and differentiated. New experiences conflict with ways of thinking which are inadequate to account for them, and this disequilibrium spurs the developmental process by which earlier stages are rejected and replaced by more adequate models. (p. 63)

Kohlberg (1970) maintained that all individuals in all cultures go through the same sequential stages, and that differences among individuals and cultures are differences in stages of developmental

status. He distinguished three levels of moral development with two stages in each level, making six in all. The levels through which the child develops are called preconventional, conventional, and autonomous. The child in the preconventional level responds to the labels of good and bad applied to actions, but interprets them in terms of physical consequences for himself, or in terms of the physical power of those who enunciate the rules. In other words, the child is responsive to the power of those who enforce the consequences of behavior. The conventional child is also a conformist, but tries to live up to the rules and expectations of the child's reference group such as the family, the peer group, and the community. The autonomous child adheres to moral principles that have validity and application apart from the group of persons who hold them and apart from the individual's identification with those persons or groups.

The aim of moral education in Kohlberg's terms is to stimulate the child's thinking and challenge him to the next stage of development, rather than indoctrinate him into fixed conventions of societal institutions, i.e., the family, the school, the church. This challenge is facilitated by exposing the child to problematic situations on the next level of thought. Specifically, Kohlberg's approach recommends: (1) knowledge of the child's state of functioning; (2) arousal among children of genuine moral conflict and disagreement about problematic situations; and (3) the presentation of modes of thought one stage above the child's own (p. 68).

The content of population and family-planning education is rich in ethical and moral propositions that might be used in the development of materials and instructional procedures to be used in moral education. Such methodology would serve the purpose of evaluating the child's present stage of moral reasoning, and at the same time challenging him to higher stages of reasoning.

Assessment of Moral Reasoning of Non-School Audiences

Kohlberg (1970) strongly recommended assessing the level of moral and cognitive reasoning of the pupil, if population and family-planning education is to have a decisive impact on the individual's decision and final action concerning population-related behavior.

Kohlberg's approach states:

If our goal is population control and our message is why to do this (which precedes how to), we first have to know to whom we are speaking, what kind of reasoning he is able to integrate with his own thinking, or how to raise his thinking to a level where our arguments become coherent to him. (p. 140)

Kohlberg's approach goes further, suggesting individual assessment of individual learning experiences. In his own words, "to attempt to reach individuals at different levels of moral maturity with the same message is at best a haphazard approach from which we would expect meager outcomes" (p. 141). Such an approach brings problems to curriculum designers since there is not a set of exercises that fits all situations or all children (Davis, 1976).

Curriculum designers of non-school programs face similar problems regarding the assessment of moral and intellectual reasoning of

prospective students, since individual or group assessment would imply costly techniques and long-term procedures. Furthermore, a feasible approach should be worked out to attain at least a group assessment of cognitive and moral reasoning. A thorough examination of those aspects that affect or influence the individual's level of moral thinking might serve the purpose of group assessment. Such an approach can be accomplished through the review of literature on pertaining issues.

CHAPTER III
METHODS AND PROCEDURES

The present study was carried out in three steps:

1. Design of a model for teaching family planning through the various areas of home economics: nutrition and health, housing, clothing, child development and family relations.
2. Evaluation of the teaching model by American and Colombian home economics students and Colombian home economists who were engaged in field work at the time of the study.
3. Revision of the teaching model, which takes into consideration the changes and amendments suggested in the evaluation.

Preliminary Steps

Several experts in the field of population and family-planning education of both Colombia and the United States were contacted with the main purpose of obtaining feedback on the feasibility and applicability of the family-planning teaching model proposed in this study. Likewise, contacts were made with administrative personnel of both Colombian and American institutions that would eventually be involved in the evaluation of the teaching model.

In Colombia, contacts were made with technical and administrative personnel of the Colombian Association for Population Studies (ACEP), the Colombian Institute of Agriculture (ICA), and the School of Home Economics of the University of Caldas.

The author's purpose in contacting ACEP was to investigate the particular needs of that institution concerning family-planning education and to become acquainted with current publications in the field of population and family-planning education published by the institution. ACEP officials reported the need for family-planning education materials that were challenging and appropriate to the Colombian socio-cultural context. With regard to current publications in the field of family-planning education, ACEP officials submitted the booklet entitled "Educacion para la Vida Familiar" (Family Life Education). The booklet is aimed at furnishing field workers with a methodology for teaching family-life education in informal groups. Its content deals primarily with notions of child development, physiology of reproduction, human sexuality, and birth control methods. After a thorough evaluation of the booklet, the author arrived at the conclusion that an approach focused on motivation for family planning would be necessary to complement the booklet approach.

Further contacts were made with the Director of the Home Economics programs of the Colombian Institute of Agriculture (ICA) and the Dean of the Home Economics School at the University of Caldas. Officials of both institutions were requested to obtain the collaboration of home economics students and home agents in the evaluation of the teaching model. Both officials expressed interest in the project they considered innovative and worthwhile, as well as a willingness to cooperate in its forthcoming evaluation.

It is regrettable that the cooperation offered by the Colombian Institute of Agriculture, ICA, was not feasible due to further

unsuccessful attempts to establish communication between newly arriving ICA officials and the author. Furthermore, the evaluation of family-planning teaching materials was done by Colombian home economists working in different institutions, instead of ICA home agents as had been originally proposed. It is important to make clear that the cooperation of the home economists was voluntary; no official links between institutions and the author were established.

In the United States, contacts were made with personnel of the Carolina Population Center of the University of North Carolina at Chapel Hill, the Guilford County Family Planning Center at Greensboro, and the American Home Economics Association (AHEA).

Personnel of the Carolina Population Center provided information on current trends in population and family-planning education. In addition, they offered assistance in the development of the project as well as free access to relevant subject-matter materials.

A meeting was held at the Guilford County Family Planning Center in Greensboro with the director of the educational section. The purpose of the meeting was to discuss the author's project and to obtain objective feedback on the usefulness and applicability of the teaching model. The director expressed the opinion that a motivational approach would be the best one when dealing with groups highly resistant to changing their reproductive behavior. Finally, the director offered further cooperation in the development of the project.

A vast amount of information dealing with family planning in home economics was provided by the American Home Economics Association

(AHEA). Information included prototype lessons for teaching family planning through different areas of home economics, and a variety of teaching aids such as posters, pamphlets, radio scripts, and visual aids, which were excellent sources of ideas for the development of family-planning educational materials.

Appraisal of Home Economics in Colombia

At the time this study was prepared, several public and private Colombian institutions offered informal education programs for those who no longer attended formal school. These informal education programs offered a great variety of training contingent upon the needs of the participants, most of whom were adult men and women from lower socioeconomic levels of both urban and rural areas.

Home economics was one of the educational programs that attracted larger audiences. Its purpose was to educate families to pursue a better standard of living. Thus, through subjects such as nutrition and health, child care, housing, home management, clothing, family relationships, and other areas, individuals learned about family needs, and how to satisfy those needs through the proper use of familiar and extra-familiar resources. The programs were executed by home agents, who were women with a high school diploma and two years of training in home economics. They generally worked under the direction and supervision of college graduates in home economics.

Most of the Colombian institutions dealing with programs for the development of agriculture offered home economics training as an integral part of the program aimed at improving the living conditions

of the rural family. Among those, the Colombian Institute of Agriculture (ICA) offered the largest nationwide home economics program reaching farm families even in the most remote areas.

Private agencies, namely the National Federation of Coffee Growers and the National Federation of Rice Growers, carried out similar programs in specific regions where these agencies were pursuing particular objectives.

Urban areas were equally reached by home economics programs offered by public and private institutions concerned with the improvement of the family standard of living. Participants of these programs were often women from the lower socioeconomic level, as well as youths no longer attending formal school. Men were also reached by home economics programs but to a lesser degree.

An appraisal of the Colombian home economics programs indicated that an approach to family-planning education through home economics was not only feasible but also desirable. In fact, an approach to family-planning education based on motivation for a better quality of life is suited to the goals, objectives, and scope of home economics programs. These programs reach a large segment of the population, specifically, those at the lower socioeconomic level of both rural and urban areas, who will become the prospective audiences of the family-planning education project proposed in this study.

Statement of the Model

The proposed model for teaching family planning basically seeks to support the alleged relationship between family size and the

family quality of life. Inasmuch as home economics is primarily concerned with the quality of life of the individual and the family, it is therefore evident that home economics is the program best suited to fulfill the goals and objectives of family-planning education.

Quality of life is a subjective concept; it means different things for different people. Nevertheless, the quality of life of the individual and his family might be appraised by the extent to which certain basic human needs are gratified. Thus, most individuals strive to satisfy such needs as food, clothing, shelter, and personal safety. Once people have fully satisfied these needs, they move into more complex social and psychological needs for gratification.

The home economics curriculum is aimed at the satisfaction of individual and family needs. Through the different areas of home economics, individuals learn about their needs, the kind of human and material resources needed to satisfy those needs, and the planning and management required to make the best use of resources.

The family quality of life is impaired when familiar and extra-familiar resources are scarce, or when these are inadequate in quality and quantity to meet the needs of the family members. In addition, the chances of improving the family quality of life are lessened when poor families have no concern for controlling the size of the family. The addition of a new child to the family unit, without the possibility of increasing the family resources, results in a resource unbalance which characterizes the condition of poverty.

Individuals can learn about the relationship between family size and family resources through a family-planning education program under a home economics curriculum. They can learn that family planning is a necessary condition if the quality of life of the family is to be preserved or improved. In sum, the concept of quality of life as an ultimate goal of family planning can be stressed through the following areas of home economics: nutrition and health, housing, clothing, home management, child development and family relationships.

Curriculum Development Based on Level of Moral and Intellectual Reasoning

The need to assess the levels of moral and intellectual reasoning of the student prior to the planning and programming of population and family-planning courses was recognized in a previous discussion dealing with the relevance of moral education in population education. Such a procedure would help in the development of curriculum materials suitable to the moral and cognitive levels of prospective target groups. Also, the possibility of group assessment through the review of literature on related issues was equally accepted as a feasible alternative when curriculum designers encounter problems regarding time and resources.

The Colombian Case

Participants of the family-planning education model were made up of lower socioeconomic level, urban and rural Colombian women.

Assessment of the expected level of moral and cognitive reasoning of this particular group was attained by reviewing the literature relevant to their moral and cognitive reasoning, in order to determine the stage of development of the group as a whole. Some excerpts from the literature are as follows:

Reichel-Dolmatoff (1961) described cultural configurations of villagers from a northern Colombian community. In the following paragraph, this group's belief about the role of the supernatural was shown as a level of reasoning.

Logical reasoning is rare. Supernatural, unknowable powers are supposed to control nature and life, and all men can do in order to survive is to avoid all occasions that traditionally spell danger Plurality of causes is doubted, and every phenomenon is rather believed to be due to one single specific cause. Few people will reason "if I do this any number of things might happen," but if it does not happen so, there was not a fault in logic but an error in action. The causal factor was not well defined, or the causal action was not carried out as it should have been. There is therefore, no interest in experimenting or in testing a new hypothesis (p. 440)

Reichel-Dolmatoff (1961) also presented evidence that the group's belief about fatalism was an indicator of reasoning level.

All attitudes toward life are eminently fatalistic A person's fate is believed to change sometimes for the better or for the worse, quite independent of the individual's conduct. Suddenly "one's luck changes," and everything goes well, but then there come periods of ill fate. As there is no escape from fate and predestination, it is thought useless to try to live according to certain norms or to make efforts to change one's lot. Individual responsibility, therefore, is not a recognized quality. The individual never believes that he himself could be responsible for his failure in a certain endeavour, but will always blame fate for his failure. (p. 441)

Fals-Borda (1955) described the role of the Catholic religion on the personal life of Colombian peasants in the following manner:

Much of the well-being of the peasants depends on the satisfaction of the religious urge. Religion has both pleasant and gratifying aspects, but on the other hand affects the spirit of enterprise and progress among peasants. An attitude of extreme resignation is a result of a complete trust in God: "the Lord giveth, and the Lord taketh away." The consequent behavior is that of negative stubbornness, a lack of desire to improve conditions. Instead, campesinos are content to leave such matters to God and supernatural forces, and they find it easy to run away from facing specific issues. (p. 50)

Gutierrez de Pineda (1968) attributed to religious influence the passive and fatalistic personality of the inhabitants of the Colombian highlands.

People have an attitude toward life of resignation, passivity, apathy, and submission. If a person is poor and sick, he would interpret his condition as God's desire for him to be poor or sick. Failure should be accepted as God's punishment and as such no action should be taken to challenge the event. Causes of sickness or disaster are beyond man's control. (p. 44)

The review of literature depicted the rural, lower-class, uneducated Colombians as fatalistic in their outlook of life, passive, apathetic, and low in achievement motivation. These traits, originated in their belief in God and supernatural forces as determinants of man's destiny, are perpetuated by their low levels of literacy. Their lack of skills and knowledge to master the environment foster their reliance on external forces which they cannot control. These considerations provide the background for the assessment of the expected level of moral and cognitive reasoning of this particular group. Based on the Kohlberg model of moral development, this group can be classified in the preconventional level, the lowest level of mental and moral reasoning in the developmental process. This level is described as follows:

Preconventional Level

At this level the child is responsive to cultural rules and labels of good and bad, right and wrong, but interprets those labels in terms of either the physical or the hedonistic consequences of action (punishment, reward, exchange of favors) or in terms of the physical power of those who enunciate the rules and labels. The level is divided into the following two stages:

Stage I: The punishment and obedience orientation. The physical consequences of action determine its goodness or badness regardless of the human being or value of these consequences. Avoidance of punishment and unquestioned deference power are valued in their own right, not in terms of respect for an underlying moral order supported by punishment and authority.

Stage II: The instrumental relativist orientation. Right action consists of that which instrumentally satisfies one's own needs and occasionally the needs of others. Human relations are viewed in terms like those of the market place. Elements of fairness, of reciprocity, and of equal sharing are present, but they are always interpreted as in a physical pragmatic way. Reciprocity is a matter of "you scratch my back and I scratch yours," not of loyalty, gratitude or justice. (Fenton et al., 1974, p. 2)

The following considerations provided the criteria for classification of the Colombian target group in the preconventional level of moral development:

Individual's complete reliance on external power, God, and supernatural forces as determinants of man's lot in life. These powers provide rewards and punishment on the grounds of the individual's right and wrong actions. Adherence to external power lies in the individual's inability to master the environment. Such a limitation stems from lower literacy levels, lack of skills and abilities, and the conditions of poverty itself. Furthermore, individuals rarely engage in decision-making processes and deliberate actions tending to

change their course in life. The above conditions might disappear as deprived individuals attain higher literacy levels, improve their living conditions, and are exposed to modern ways of life.

Individual's tendency to think in terms of personal or family benefits rather than in terms of society, country, or world benefits.

Individuals living in a state of poverty tend to think primarily in terms of satisfaction of personal and family needs such as food, clothing, housing, and family services. Consequently, societal needs or country needs might be beyond their interests and concerns.

The assessment of the expected level of moral and cognitive reasoning of the Colombian group has the following implications in curriculum planning for population and family-planning education.

Individuals, before they feel that they should take some action, i.e., fertility control, must feel that they can take some action (Davis, 1976). In other words, individuals must develop a positive sense of efficacy or internal locus of control before they are driven into moral propositions stating that they should find solutions to a problem. A sense of efficacy might be fostered through learning experiences showing the participant that certain events can be changed, and that he has the ability to change them. This process can be attained by letting the student be involved in the learning process, instead of being a passive receptor of facts. The task of the curriculum designer of a population and family-planning education program is, therefore, to plan learning experiences such as demonstrations, games, and simulations that encourage the full involvement of the participant in the learning process.

Once the participants have learned that they can take some action, they must learn that they should take some action. Since individuals in the first or second stage of moral development think primarily in terms of satisfaction of personal needs, the motivations for family planning should be stated in terms of satisfaction of personal and family needs as well. Motivations might include benefits for the community as well. The improvement of the quality of family life is generally used as a motivational appeal for family planning, when population and family-planning education programs are addressed to lower-income audiences.

Family Planning Education Project

Elements of the Teaching Model

General Goals

Three goals in terms of the participants are stated for the present project:

1. To encourage participants to understand the relationship between family size and the quality of life of the individual, the family, and the community.
2. To provide participants with the knowledge, values, and attitudes necessary to evaluate the effects of the family size upon the quality of life of the individual, the family, and the community.
3. To help participants make rational decisions concerning the ideal family size desirable to maintain the quality of life of the individual, the family, and the community.

Teaching Units

The teaching model is comprised of four teaching units, each one representing the following areas of home economics:

1. Nutrition and Health
2. Clothing
3. Housing
4. Child Development and Family Relationships.

Teaching units do not form a single course; they are independent from each other since the purpose of population education is to integrate single lessons or units into existing home economics programs.

Teaching units include two or more lesson plans. Nutrition and Health is the largest unit containing five lesson plans, followed by Child Development and Family Relations with four lesson plans. Housing and Clothing units contain three and two lesson plans, respectively.

The content of each lesson includes the following parts: (1) behavioral objectives, (2) generalizations, (3) concepts, (4) learning experiences, (5) teaching aids, and (6) evaluation.

1. Objectives. A behavioral objective is stated for each lesson. The statement of the objectives follow the criteria suggested by Johnson (1966, pp. 109-113).

- a. Behavioral objectives should be stated in terms of changes to be brought about in the students. Changes might be in terms of knowledge, feelings, attitudes, and skills.

- b. Objectives should provide guidelines for selecting the content, planning of learning experiences, and evaluation of learning.

2. Generalizations

Generalizations are summary statements based on objective data on experience, or on theory accepted by specialists in the field. Green (1975) suggested several characteristics of generalizations that can provide the criteria for stating generalizations. These are as follows:

- a. Generalizations are true statements, not opinions.
- b. Generalizations are stated as complete sentences rather than phrases or single words.
- c. Generalizations have an element of universality.
- d. Generalizations state a conclusion.

3. Concepts

The content of the lesson can take the form of a structure composed of concepts and supported by generalizations.

4. Learning Experiences

Learning experiences are the means by which the student fulfills the class objectives that help him to learn and practice appropriate behavior. Fleck (1974) suggested several criteria for selecting methods that will be considered in the planning of learning experiences:

- a. Methods should imply a democratic philosophy.
- b. Methods should be suitable to the particular objectives of the lesson.

- c. Methods should be adapted to the student's needs, problems, interests, and maturity.
- d. Methods should provide for individual differences in learning, capacity, and background.
- e. Methods should provide for active involvement of the student.
- f. Methods should be relevant to the lives of the students.

5. Teaching Aids

Teaching aids are the instruments required to foster learning in the students, and to make the learning experiences more realistic and innovative. Hall and Paolucci (1970, p. 241) suggested several criteria for selecting instructional materials which will be considered in the planning and designing of teaching aids:

- a. Materials are the best means available to achieve the goals.
- b. Materials should make the learning situation more realistic and concrete.
- c. Materials should be appropriate for the age, intelligence, interest, and experience of the students.
- d. Materials should make learning experiences easier and quicker.
- e. Materials should present information in an interesting manner.
- f. Materials should stimulate the students to think critically.

6. Evaluation

Evaluation is an attempt to determine whether the objectives of the lesson have been accomplished. The type of evaluation should be included in the statement of the objectives.

Translation of Written Materials

Written materials were translated into Spanish after their completion and revision. Assessment of the translation was made by a bilingual, English-and-Spanish home economist who has had much experience in extension work in Colombia.

Pilot Test

A pilot test was conducted with the purpose of examining the feasibility and applicability of the teaching lessons. A lesson plan in the area of nutrition and health was designed according to the criteria previously established for the different parts of the lesson plans. The lesson plan was translated into Spanish for its further appraisal by Colombian personnel.

Three Colombian judges, represented by two college instructors from the School of Home Economics at the University of Caldas and one home agent from the Colombian Institute of Agriculture (ICA), were furnished with the Spanish version of the lesson plan on nutrition and health. The judges were requested to read the materials and appraise them in terms of their feasibility, usefulness, and applicability. Feedback from the judges was received several weeks later when they expressed positive remarks regarding the approach and content of the lesson.

Evaluation of the Teaching Model

Description of the Judges

The evaluation of the teaching model was conducted by American and Colombian home economics students and Colombian home economist professionals.

American students were graduate students in home economics at the University of North Carolina at Greensboro; most of these students had backgrounds in education. Colombian personnel were represented by senior home economics students from the University of Caldas, and home economists from different Colombian institutions.

A package containing 11 lessons and their corresponding evaluation sheets were distributed among 35 independent judges as follows:

American home economics students	8
Colombian home economics students	12
Colombian home economist professionals	15

Twenty-six out of 35 independent judges actually returned the evaluation forms as follows:

American home economics students	6
Colombian home economics students	9
Colombian home economist professionals	11

American home economics students were not furnished with the second section of the evaluation form, as they did not have the Colombian background needed to judge the feasibility and applicability of the teaching model.

The Instrument

A rating scale, divided into two sections, was used in the evaluation of the Family-Planning Teaching Model. The instrument consisted of a five-point scale; the code to responses was as follows: (1) Strongly Agree, (2) Agree, (3) Undecided, (4) Disagree, and (5) Strongly Disagree.

The first section which was used in the evaluation of each one of the lesson plans consisted of seven subheadings corresponding to the different parts of the lesson plan; each subheading was comprised of several items making a total of 28.

The second section was used in the assessment of the feasibility and applicability of the teaching model. This part, which consisted of five statements, was done after completion of the first section dealing with evaluation of the different lesson plans.

Statistical Treatment

Data were tabulated and analyzed descriptively. Data corresponding to the first part of the evaluation were treated as follows: items in which 60 percent or more of the respondents agreed were not subject to revision; items in which less than 60 percent agreed were subject to revision. In addition, items in which a small percentage of respondents were undecided or in disagreement were given thoughtful consideration, as respondents usually made comments, remarks, or suggestions that the author considered highly relevant for the improvement of the lesson plans. As a result, several lessons underwent significant changes and were again subject to revision by three

Colombian home economists who were willing to cooperate in the second revision.

CHAPTER IV
RESULTS AND DISCUSSION

This chapter presents the evaluation results of the 11 lesson plans within four teaching units corresponding to four areas of home economics. Also, a discussion is given of the changes and amendments introduced in the lesson plans, revised as a result of the evaluation. A second part presents the results of the overall evaluation of the family-planning teaching model and a discussion concerning its feasibility and applicability. The revised lesson plans are presented as Appendix A.

Nutrition and Health

The Nutrition and Health teaching unit deals with the child's nutritional needs and the relationship of these needs to family size. The subject matter discussed in this unit maintains that a child's health status and capacity to grow and develop are highly related to the kind of food he eats. His nutritional needs must be satisfied at any stage of development, but especially at the prenatal and infant stages. The nutrition of the pregnant woman plays an important role in the child's nutrition and health status. If she has received a healthy diet during pregnancy, she is likely to bear healthy and strong children; if she spaces births at least two years apart, she is likely to breast-feed her babies longer and protect her own health.

The state of health and the nutrition of the child and the family are seriously threatened when low-income families do not control the size of the family and keep having children they cannot feed adequately. Poor families can help themselves to improve the quality of the family diet if they plan the size of the family based on the availability of family food resources, and if they adopt positive practices regarding food production and consumption.

Four general objectives were stated for the original teaching unit, and four lesson plans were designed to meet the objectives. However, the revised teaching unit presents five general objectives and five lesson plans, as a result of the changes and amendments suggested in the evaluation.

General Objectives of the Unit

The wording of all general objectives was revised as a few respondents indicated they were not clearly stated (see Table 1). In addition, a new objective arose from the need expressed by some respondents who claimed that it was necessary to fully understand the basic nutrition concepts for a healthy family diet before going into discussion of the nutritional needs of mother and child. Consequently, a new objective related to the meaning of healthy family diet became the first of five general objectives of the revised teaching unit. Accordingly, the following lessons were revised and adapted to the general objectives of the unit.

1. Healthy family diet
2. Health of the pregnant woman and her unborn child

Table 1
 Nutrition and Health: Lesson 2
 Health of the Pregnant Woman
 And Her Unborn Child

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Unit General Objectives</u>										
Are Clearly Stated	19	73.08	3	11.54	2	7.69	2	7.69	26	100
Can Be Achieved	18	69.23	6	23.08			2	7.69	26	100
<u>Behavioral Objectives</u>										
Are Clearly Stated	18	69.23	6	23.08	2	7.69			26	100
Clearly Determine the Lesson Content	20	76.92	5	19.23	1	3.84			26	99.99
Clearly Determine the Learning Experience	20	76.92	5	19.23	1	3.84			26	99.99
Clearly Determine the Evaluation Procedure	18	69.23	6	23.08	2	7.69			26	100
Can Be Achieved	18	69.23	6	23.08	2	7.69			26	100

Table 1 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Generalization</u>										
Information is Accurate	25	96.15	1	3.84					26	99.99
Information is Relevant	26	100.00							26	100
Information is a Lesson Summary	25	96.15	1	3.84					26	99.99
<u>Concepts</u>										
Information is Clear	24	92.31	2	7.69					26	100
Information is Accurate	24	92.31	2	7.69					26	100
Information is Supported by the Generalization	26	100.00							26	100
Information is Relevant to the Lesson Plan	25	96.15	1	3.84					26	99.99

Table 1 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Learning Experiences</u>										
Are Appropriate for Reaching the Class Objective	23	88.46	3	11.54					26	100
Are Familiar to Participants	23	88.46	2	7.69			1	3.84	26	99.99
Provide for Participants' Involvement in the Learning Process	24	92.31	2	7.69					26	100
Are Relevant to Participants' Needs and Problems	22	84.61	2	7.69			2	7.69	26	99.99
Are Suited to the Participants' Interests	20	76.92	4	15.38			2	7.69	26	99.99
Are Suited to the Participants' Educational Level	20	76.92	4	15.38			2	7.69	26	99.99

Table 1 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Teaching Aids</u>										
Are Appropriate for Reaching the Class Objective	23	88.46	3	11.54					26	100
Are Relevant to the Class Content	22	84.61	3	11.54			1	3.84	26	99.99
Stimulate Learning	22	84.61	3	11.54			1	3.84	26	99.99
Are Suited to the Participants' Interests	20	76.92	6	23.08					26	100
Are Suited to the Participants' Educational Level	20	76.92	6	23.08					26	100
<u>Evaluation</u>										
Is Clearly Stated	24	92.31	2	7.69					26	100
Is Appropriate to the Participants' Educational Level	20	76.92	6	23.08					26	100

Note: SA - Strongly Agree
 A - Agree
 U - Undecided

SD - Strongly Disagree
 D - Disagree
 NR - No Response

3. Nutritional needs of children.
4. Family food supply and family size.
5. Improving the quality of the family diet.

Lesson 1: Healthy Family Diet

This lesson responds to one of the major suggestions made by respondents who recommended a new lesson explaining the meaning of healthy family diet. In fact, this concept was mentioned in almost all of the lessons on nutrition and health, and needed to be amply discussed before going into discussion of the nutritional needs of mother and child.

Even though this lesson did not go through the evaluation procedures like the rest of the lessons, it was reviewed by three Colombian home economists who were willing to cooperate in a second revision. The reviewers reported that the lesson did comply with the requirements assigned to a good lesson plan.

Behavioral objectives. Four behavioral objectives were stated for this lesson. In accordance with these, participants were expected to understand the meaning of healthy family diet by understanding the nutritional value of foods, understanding the concept of food groups, and being able to give examples of healthy diets using local foods.

Learning experiences. Four learning experiences were designed to attain behavioral objectives. These included group discussions, a survey of typical meals, and meal planning and preparation. In group discussion, participants are expected to identify foods and

the functions of those foods. A survey of typical meals is an activity in which participants are expected to identify their own food habits and to determine whether they are suited to the nutritional needs of the family or need to be improved. The planning and preparation of a meal is a laboratory experience in which participants have the opportunity to apply nutrition facts to the planning and preparation of a meal, as well as to practice appropriate cooking methods.

Teaching aids. Teaching aids for this lesson were varied; they included charts and bulletin boards illustrating the functions of foods, and the classification of foods in food groups. Moreover, each learning experience fully described the teaching aids and resources needed to conduct each particular activity.

Lesson 2: Health of the Pregnant Woman and Her Unborn Child

This lesson underwent few changes as most respondents assigned positive ratings to each one of the items of the rating scale (see Table 1). The aim of the lesson was to explore the relationship between good nutrition and child spacing, and the health of the pregnant woman and her unborn child.

Behavioral objectives. The original lesson included five behavioral objectives which were reduced to four in the revised lesson due to alleged duplication. Overall objectives obtained positive ratings in the rating scale.

According to behavioral objectives, participants are expected to understand the relationship between good nutrition and child spacing,

and the health of the pregnant woman and her unborn child, by being able to identify the appropriate food for the pregnant woman, to express reasons why a healthy diet protects the health of the mother and child, to explain what might happen, in terms of health growth, to babies of malnourished mothers, and to explain why child spacing is associated with the health of mother and child.

Concepts. A few respondents indicated that some concepts overlapped and were repetitious. Furthermore, lesson concepts were revised and reordered following the sequence order of behavioral objectives.

Learning experiences. Learning experiences were regarded by respondents as highly innovative and worthwhile. The original lesson plan contained five learning experiences which were reduced to four given the duplication found in the first two, both of which dealt with plant cultivation.

Learning experiences of the revised lesson included an experiment, a discussion, a lecture, and a demonstration. In the experiment, participants are shown the effects of good and poor gardening practices upon the plant growth. In the discussion, focusing on the analogy between the fertile land and the healthy mother, participants are led to conclude that proper care of the pregnant woman and spacing of children are likely to result in healthy mothers and children. The lecture is designed to inform participants about common health problems of pregnant women caused by malnutrition and the importance of child spacing on the mother's health. Through a demonstration, participants get involved in the planning and preparation of a meal suited to the needs of the pregnant woman.

Teaching aids. Teaching aids were reported to be appropriate for the lesson. They included flip charts and bulletin boards illustrating the analogy between the fertile land and the healthy mother. Also, a poster illustrating a healthy mother and child conveyed the idea that good nutrition and child spacing result in a healthy mother and child.

Evaluation. Evaluation statements were considered appropriate for reaching class objectives, but a few respondents suggested stating them in terms of questions rather than behavioral objectives as they had been previously stated. Revision of evaluation statements was made as suggested.

Lesson 3: Nutritional Needs of Children

The original lesson dealt with nutritional needs of the child during his first years of life, and explored the nutritional value and functions of food in the child's growth and development. The lesson content was subjected to revision to comply with the recommendations brought about in the evaluation (see Table 2). One of the major recommendations referred to the need to emphasize the importance of breast-feeding up to a year or longer along with supplementary feeding, and the mother's necessity to space births in order to ensure longer breast-feeding. This recommendation stemmed from the fact that malnutrition, as one of the major problems affecting large segments of the Colombian population, is caused by the infant's early weaning followed by poor feeding practices. Currently, there is a nationwide educational campaign aimed at decreasing the incidence of

Table 2
 Nutrition and Health: Lesson 3
 Nutritional Needs of Children

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Unit General Objectives</u>										
Are clearly stated	20	76.92	4	15.38	2	7.69			26	99.99
Can be achieved	18	69.23	6	23.08	2	7.69			26	100.
<u>Behavioral Objectives</u>										
Are clearly stated	18	69.23	8	30.77					26	100.
Clearly determine the lesson content	25	96.15	1	3.84					26	99.99
Clearly determine the learning experience	25	96.15	1	3.84					26	99.99
Clearly determine the evaluation procedure	16	61.54	6	23.08	3	11.54	1	3.84	26	100.
Can be achieved	26	100.00							26	100.

Table 2 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Generalization</u>										
Information is accurate	26	100.00							26	100.
Information is relevant	26	100.00							26	100.
Information is a lesson summary	21	80.77	5	19.23					26	99.99
<u>Concepts</u>										
Information is clear	26	100.00							26	100.
Information is accurate	23	88.46	3	11.54					26	100.
Information is supported by the generalization	23	88.46	3	11.54					26	100.
Information is relevant to the lesson plan	18	69.23	8	30.77					26	100.

Table 2 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Learning Experiences</u>										
Are appropriate for reaching the class objective	18	69.23	6	23.08			2	7.69	26	100.
Are familiar to participants	16	61.54	6	23.08	4	15.38			26	100.
Provide for participants' involvement in the learning process	14	53.84	6	23.08	6	23.08			26	100.
Are relevant to participants' needs and problems	16	61.54	8	30.77			2	7.69	26	100.
Are suited to the participants' interests	16	61.54	8	30.77			2	7.69	26	100.
Are suited to the participants' educational level	17	65.38	6	23.08	2	7.69	1	3.84	26	99.99

Table 2 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Teaching Aids</u>										
Are appropriate for reaching the class objective	26	100.00							26	100.
Are relevant to the class content	26	100.00							26	100.
Stimulate learning	18	69.23	6	23.08			2	7.69	26	100.
Are suited to the participants' interests	18	69.23	4	15.38	2	7.69	2	7.69	26	99.99
Are suited to the participants' educational level	18	69.23	4	15.38	1	3.84	3	11.54	26	99.99
<u>Evaluation</u>										
Is clearly stated	26	100.00							26	100.
Is appropriate to the participants' educational level	20	76.92	6	23.08					26	100.

Note. SA - Strongly Agree
 A - Agree
 U - Undecided

SD - Strongly Disagree
 D - Disagree
 NR - No Response

malnutrition by encouraging nursing women to engage in long breast-feeding practices. Other changes were also introduced in different parts of the lesson plan.

Behavioral objectives. Four behavioral objectives were stated in the original lesson. Even though these obtained positive ratings in the rating scale, a complete revision was necessary in order to include objectives related to breast-feeding and to remove one dealing with nutritional value and functions of foods, which was transferred to Lesson 1 concerned with healthy family diet.

The revised lesson included five behavioral objectives in which participants are expected to understand the importance of good nutrition during the child's first years of life by being able to give reasons supporting long breast-feeding, to explain the concept of supplementary food, to describe the type of diet needed by a child one year old or older, to list some children's health problems associated with malnutrition, and to explain the relationship between breast-feeding and child spacing.

Concept. In the original lesson, concepts were judged to be clear, accurate, and relevant to the lesson plan. In the revised lesson, concepts remained basically unchanged, but more emphasis was placed on subject matter related to breast-feeding.

Learning experiences. Five learning experiences were designed to attain the objectives of the original lesson. Respondents indicated that one of the activities did not provide for participants' involvement in the learning process (lecture), and another was not suited to participants' interests and problems (field trip to children's

hospital). These observations along with the need to adjust learning experiences to the revised behavioral objectives and lesson concepts suggested full revision of the original learning experiences.

The revised lesson included four learning experiences such as two class discussions, a lecture, and a demonstration. One of the discussions on infant feeding practices is intended to lead participants to discover by themselves the benefits of long breast-feeding and the negative consequences of early weaning. This activity is followed by a lecture aimed at providing precise information on child nutrition. Finally, participants learn through a demonstration technique how to fix supplementary food and an infant formula.

Teaching aids. According to respondents' opinions, teaching aids of the original lesson fulfilled the criteria for established good teaching aids, but like the other parts of the lesson plan had to be revised in order to adjust them to the behavioral objectives and lesson content of the revised lesson.

Five teaching aids were suggested for the revised lesson. These included charts, flannelgraphs, and bulletin boards illustrating breast-feeding and a child's diet during the first year of life. Also, a poster depicted a healthy-looking mother breast-feeding her baby underlying the idea that long breast-feeding is related to child spacing and proper diet of the nursing mother.

Lesson 4: Family Food Supply and Family Size

The aim of this lesson was to explore the relationship between family food needs, family size, and family food supply. The lesson was subjected to thorough revision since some respondents suggested some changes aimed at improvement (see Table 3).

Behavioral objectives. The original lesson presented one behavioral objective which some respondents judged as non-directional, difficult to measure, and inadequate for covering the scope of the lesson content.

These remarks were taken into consideration while formulating three new behavioral objectives which were intended to get participants to understand the relationship between family food needs, family food supply, and family size by explaining the meaning of the alleged relationship; to explain what may happen when family size increases while family food supplies remain the same; and to explain the relationship between family size planning and satisfaction of family food needs.

Learning experiences. Three learning experiences were designed to meet the class objectives. The first one is an introductory activity in which participants learn, by sharing a portion of food, how food distribution is affected by the number of people in class. The second activity deals with food distribution at family level; a simulation game was designed to help participants understand how the distribution of food varies in a large and a small family. The third activity brings a short case story about a low-income family who faces the prospects of food shortage as the number of children

Table 3
 Nutrition and Health: Lesson 4
 Family Food Supply and
 Family Size

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Unit General Objectives</u>										
Are clearly stated	21	80.77	5	19.23					26	100.
Can be achieved	21	80.77	4	15.38			1	3.84	26	99.99
<u>Behavioral Objectives</u>										
Are clearly stated	15	57.69	6	23.08	5	19.23			26	100.
Clearly determine the lesson content	15	57.69	8	30.77	3	11.54			26	100.
Clearly determine the learning experience	16	61.54	7	26.92	3	11.54			26	100.
Clearly determine the evaluation procedure	18	69.23	5	19.23	3	11.54			26	100.
Can be achieved	16	61.54	10	38.46					26	100.

Table 3 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Generalization</u>										
Information is accurate	20	76.92	5	19.23	1	3.84			26	99.99
Information is relevant	22	84.61	4	15.38					26	99.99
Information is a lesson summary	22	84.61	4	15.38					26	99.99
<u>Concepts</u>										
Information is clear	20	76.92	5	19.23	1	3.84			26	99.99
Information is accurate	20	76.92	6	23.08					26	100.
Information is supported by the generalization	24	92.31	2	7.69					26	100.
Information is relevant to the lesson plan	24	92.31	2	7.69					26	100.

Table 3 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Learning Experiences</u>										
Are appropriate for reaching the class objective	16	61.54	4	15.38	6	23.08			26	100.
Are familiar to participants	18	69.23	4	15.38	4	15.38			26	99.99
Provide for participants' involvement in the learning process	23	88.46	3	11.54					26	100.
Are relevant to participants' needs and problems	25	96.15	1	3.84					26	99.99
Are suited to the participants' interests	22	84.61	4	15.38					26	99.99
Are suited to the participants' educational level	20	76.92	5	19.23			1	3.84	26	99.99

Table 3 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Teaching Aids</u>										
Are appropriate for reaching the class objective	17	65.38	6	23.08	3	11.54			26	100.
Are relevant to the class content	19	73.08	6	23.08	1	3.84			26	100.
Stimulate learning	20	76.92	3	11.54	3	11.54			26	100.
Are suited to the participants' interests	18	69.23	8	30.77					26	100.
Are suited to the participants' educational level	18	69.23	8	30.77					26	100.
<u>Evaluation</u>										
Is clearly stated	24	92.31	2	7.69					26	100.
Is appropriate to the participants' educational level	16	61.54	10	38.46					26	100.

Note. SA - Strongly Agree
A - Agree
U - Undecided

SD - Strongly Disagree
D - Disagree
NR - No Response

increases. Participants are expected to discuss the problem facing this family and eventually arrive at the conclusion that family planning should be considered when poor families have no food resources to attend the nutritional needs of the growing family.

Teaching aids. Teaching aids like learning experiences were adapted to the behavioral objectives of the class. These included two contrasting charts showing how food distribution is affected when the size of the family increases. The contrast is represented by two pictures: one illustrates a balance in which family size (a small family) and food supply are in state of equilibrium; the other represents a balance in which family size (large family) and food supply are not in equilibrium. Another teaching aid illustrates how food distribution is affected by the size of the family.

Lesson 5: Improving the Quality Of the Family Diet

The concept of the family diet refers to both quality and quantity of food; both concepts are discussed in this lesson dealing with ways of improving the quality of the family diet.

The evaluation results pointed out some aspects to be revised in several parts of the lesson plan (see Table 4).

Behavioral objectives. The original lesson presented two behavioral objectives which were judged by some respondents to be unclear statements lacking direction. Revision of the objectives was done following the criteria established for good behavioral objectives.

Table 4
 Nutrition and Health: Lesson 5
 Improving the Quality of the
 Family Diet

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Unit General Objectives</u>										
Are clearly stated	16	61.54	6	23.08	2	7.69	2	7.69	26	100.
Can be achieved	16	61.54	8	30.77	2	7.69			26	100.
<u>Behavioral Objectives</u>										
Are clearly stated	16	61.54	6	23.08	2	7.69	2	7.69	26	100.
Clearly determine the lesson content	15	57.69	6	23.08	3	11.54	2	7.69	26	100.
Clearly determine the learning experience	20	76.92	6	23.08					26	100.
Clearly determine the evaluation procedure	16	61.54	6	23.08	2	7.69	2	7.69	26	100.
Can be achieved	24	92.31	2	7.69					26	100.

Table 4 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Generalization</u>										
Information is accurate	24	92.31	2	7.69					26	100.00
Information is relevant	26	100.00							26	100.00
Information is a lesson summary	18	69.23	6	23.08	2	7.69			26	100.00
<u>Concepts</u>										
Information is clear	26	100.00							26	100.00
Information is accurate	23	88.46	2	7.69	1	3.84			26	99.99
Information is supported by the generalization	24	92.31	1	3.84	1	3.84			26	99.99
Information is relevant to the lesson plan	25	96.15	1	3.84					26	99.99

Table 4 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Learning Experiences</u>										
Are appropriate for reaching the class objective	22	84.61	4	15.38					26	99.99
Are familiar to participants	20	76.92	5	19.23			1	3.84	26	99.99
Provide for participants' involvement in the learning process	22	84.61	3	11.54			1	3.84	26	99.99
Are relevant to participants' needs and problems	18	69.23	6	23.08	2	7.69			26	100.
Are suited to the participants' interests	18	69.23	6	23.08	1	3.84	1	3.84	26	99.99
Are suited to the participants' educational level	16	61.54	10	38.46					26	100.

Table 4 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Teaching Aids</u>										
Are appropriate for reaching the class objective	16	61.54	6	23.08	3	11.54	1	3.84	26	100.
Are relevant to the class content	21	80.77	3	11.54	2	7.69			26	100.
Stimulate learning	17	65.38	7	26.92	2	7.69			26	99.99
Are suited to the participants' interests	19	73.08	6	23.08	1	3.84			26	100.
Are suited to the participants' educational level	17	65.38	6	23.08	3	11.54			26	100.
<u>Evaluation</u>										
Is clearly stated	24	92.31	2	7.69					26	100.
Is appropriate to the participants' educational level	18	69.23	8	30.77					26	100.

Note. SA - Strongly Agree
A - Agree
U - Undecided

SD - Strongly Disagree
D - Disagree
NR - No Response

Three behavioral objectives were reformulated for the revised lesson; the first two objectives seek participants' understanding of the various ways of improving the quality of the family diet, family planning being one of the alternative solutions when family food supply cannot be increased as the size of the family increases. The third objective directs participants to apply what they have learned by encouraging them to engage in at least one experience aimed at improving the quality of their family diets.

Concepts. Concepts, along with the generalization statement, were revised as some respondents indicated that the wording of the statements was not clear. To avoid confusion of terms, concepts were arranged in two groups; those related to improvement of the quality of food, and those concerned with increasing the quantity of food.

Learning experiences. The learning experiences obtained positive ratings in the rating scale, but were revised to adjust them to the revised behavioral objectives.

The revised lesson adopted from the original lesson three learning experiences dealing with class discussion, demonstrations, and a tasting buffet, and introduced a new one related to a home project.

In class discussion, participants are encouraged to apply previous knowledge, by trying to find ways of improving certain poor practices that affect the quality and quantity of food. Family planning is discussed as one of the ways families should consider to

enhance the quality of the family diet. Through demonstrations, participants are shown how to improve a given practice. A list of demonstrations is suggested so the teacher can choose those that indeed represent the needs, problems, and interests of participants. A tasting buffet seeks to introduce new foods, usually absent from the family diet due to prejudice, ignorance, taboo, or rigid eating habits. Finally, by means of home projects, participants are encouraged to engage in individual practices aimed at improving the family diet. In this way, participants learn that they can take some initiative to enhance the family diet.

Teaching aids. Teaching aids of the original lesson were not subjected to revision, because they obtained positive ratings in the rating scale and were suited to the behavioral objectives, lesson content, and learning experiences of the revised lesson. Teaching aids suggested for this lesson included several bulletin boards illustrating how to enhance the quality of the family diet.

Housing

The area of housing dealt with family housing needs and relationship to family size. The subject matter discussed in this unit basically maintains that good quality housing fulfills the individual's and family's needs for protection, security, privacy, and comfort. The full satisfaction of these needs is threatened when the size of the family increases while the existing housing resources remain unchanged. Indeed, the problem is worsened when families keep bearing children without any planning at all.

The problem of unplanned births is felt at community levels where the impact of overpopulation is evident in the chronic housing shortages. Not only the quantity but also the quality of housing is affected by overpopulation since a large number of families who cannot afford a suitable place to live end up living in overcrowded and unhealthy conditions. The problem is aggravated by the family's lack of resources for improving poor housing conditions, thus contributing to housing deterioration as well.

Poor families can help themselves to improve the quality of their homes if they plan the size of the family according to the availability of housing resources, and if they engage in practices tending to enhance the quality of housing.

The original teaching unit included five general objectives and two lesson plans. Changes and amendments suggested in the evaluation did not alter the number of objectives, but made explicit the need for a new lesson. Consequently, the revised teaching unit presents five general objectives and three lesson plans. Changes and amendments introduced in the teaching unit are discussed next.

General Objectives of the Unit

Almost all the objectives of the original teaching unit were described by some respondents as unclearly stated and furthermore difficult to measure. Also, many respondents suggested that two lessons were insufficient to meet five general objectives (see Table 5).

Table 5

Housing: Lesson 1, Family Housing Needs

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Unit General Objectives</u>										
Are clearly stated	17	65.38	3	11.54	6	23.08			26	100.
Can be achieved	20	76.92	6	23.08					26	100.
<u>Behavioral Objectives</u>										
Are clearly stated	22	84.61	4	15.38					26	99.99
Clearly determine the lesson content	20	76.92	6	23.08					26	100.
Clearly determine the learning experience	17	65.38	9	34.61					26	99.99
Clearly determine the evaluation procedure	17	65.38	9	34.61					26	99.99
Can be achieved	24	92.31	2	7.69					26	100.

Table 5 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Generalization</u>										
Information is accurate	25	96.15	1	3.84					26	99.99
Information is relevant	20	76.92	6	23.08					26	100.
Information is a lesson summary	18	69.23	8	30.77					26	100.
<u>Concepts</u>										
Information is clear	24	92.31	2	7.69					26	100.
Information is accurate	24	92.31	2	7.69					26	100.
Information is supported by the generalization	24	92.31	2	7.69					26	100.
Information is relevant to the lesson plan	24	92.31	2	7.69					26	100.

Table 5 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Learning Experiences</u>										
Are appropriate for reaching the class objective	16	61.54	6	23.08	4	15.38			26	100.
Are familiar to participants	16	61.54	8	30.77	2	7.69			26	100.
Provide for participants' involvement in the learning process	24	92.31	2	7.69					26	100.
Are relevant to participants' needs and problems	16	61.54	10	38.46					26	100.
Are suited to the participants' interests	16	61.54	10	38.46					26	100.
Are suited to the participants' educational level	16	61.54	8	30.77	2	7.69			26	100.

Table 5 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Teaching Aids</u>										
Are appropriate for reaching the class objective	15	57.69	8	30.77	3	11.54			26	100.
Are relevant to the class content	16	61.54	6	23.08	3	11.54	1	3.84	26	100.
Stimulate learning	17	65.38	9	34.61					26	99.99
Are suited to the participants' interests	17	65.38	7	26.92			2	7.69	26	99.99
Are suited to the participants' educational level	17	65.38	8	30.77			1	3.84	26	99.99
<u>Evaluation</u>										
Is clearly stated	23	88.46	3	11.54					26	100.
Is appropriate to the participants' educational level	20	76.92	6	23.08					26	100.

Note. SA - Strongly Agree
 A - Agree
 U - Undecided

SD - Strongly Disagree
 D - Disagree
 NR - No Response

Based on the evaluation remarks, general objectives were restated under the criteria for instructional objectives and a new lesson was written. The new lesson was designed to attain the last two general objectives which were barely covered in the original lessons.

The following lessons were revised and adapted to the general objectives of the unit.

1. Family Housing Needs
2. Family Size and Relationship to Housing Resources
3. Effect of Overpopulation on the Quality of Community Housing

Lesson 1: Family Housing Needs

The lesson on family housing needs underwent substantial changes since the original scope of the lesson, dealing with family housing needs and improvement of housing conditions was limited to subject matter dealing with family's housing needs. The concept dealing with improvement of housing conditions became the subject matter of the third lesson plan.

The revised lesson explored the minimal requirements a house should exhibit in order to fulfill the individual's and family's needs for health, protection, comfort, and privacy (see Table 5).

Behavioral objectives. Two behavioral objectives stated for the original lesson were subjected to revision, since a few respondents expressed doubts as to whether the statements would determine learning experiences and evaluation procedures. Also, behavioral objectives needed to be revised in order to adjust them to the scope of the revised lesson. Thus, an objective dealing with ways of

improving housing conditions was removed, because that subject matter was beyond the scope of the revised lesson. Instead, a new objective was formulated to replace the former one.

The revised lesson presents two behavioral objectives aimed at making participants recall and understand that good quality housing enhances the health and well-being of the family.

Learning experiences. Two learning experiences were designed for the original lesson; however, about 40 percent of respondents either disagreed or doubted as to whether they would meet the criteria of a good learning experience. Learning experiences were carefully revised that fitted behavioral objectives and the scope of the revised lesson. Two learning experiences were selected, both dealing with class discussions. In the first activity, participants become familiar with the functions of housing by observing pictures specifically designed for that purpose. In the second activity, participants are expected to use previous knowledge by being able to identify poor and good housing features in pictures, photographs, and other sources.

Teaching aids. Teaching aids obtained poor ratings in one item of the rating scale; about 30 percent of respondents were undecided or disagreed that the teaching aids were appropriate for reaching the class objectives. Teaching aids were carefully revised to ensure they would be appropriate for achieving the objectives. Suggested teaching aids were a flipchart illustrating the functions of housing, a display of photographs illustrating the functions of housing, and a poster designed by the teacher depicting the idea that good quality housing enhances the health and well-being of its dwellers.

Evaluation. The evaluation, like other parts of the lesson, was revised in order to make the evaluation procedures consistent with the behavioral objectives and lesson content of the revised lesson plan.

Lesson 2: Family Size and Relationship to Housing Resources

This lesson explores the relationship between family housing needs, housing resources, and family size. It suggests the practice of family planning as a way to maintain a balance between family size and available housing resources.

The original lesson underwent substantial changes since the evaluation results suggested revisions of behavioral objectives, learning experiences, and teaching aids. The changes and amendments in this lesson are discussed next (see Table 6).

Behavioral objectives. About 50 percent of respondents either disagreed or doubted that the objective was suitable to the lesson plan. They indicated that the objective was not clearly stated and did not clearly determine the lesson content, learning experiences, and evaluation procedures.

Two behavioral objectives were restated. Their ultimate purpose was to make participants understand that family housing needs, housing resources, and family size are related, and that family planning helps to maintain a stable relationship among these three elements.

Generalization. The generalization statement as well as the concepts were revised and rewritten according to the revised behavioral objectives and lesson content.

Table 6

Housing: Lesson 2, Family Size and Relationship
To Housing Resources

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Unit General Objectives</u>										
Are clearly stated	17	65.38	3	11.54	3	11.54	3	11.54	26	100.
Can be achieved	15	57.69	9	34.61	2	7.69			26	99.99
<u>Behavioral Objectives</u>										
Are clearly stated	14	53.84	3	11.54	9	34.61			26	99.99
Clearly determine the lesson content	16	61.54	3	11.54	7	26.92			26	100.
Clearly determine the learning experience	14	53.84	4	15.38	8	30.77			26	99.99
Clearly determine the evaluation procedure	14	53.84	3	11.54	9	34.61			26	99.99
Can be achieved	19	73.08	3	11.54	3	11.54	1	3.84	26	100.

Table 6 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Generalization</u>										
Information is accurate	17	65.38	9	34.61					26	99.99
Information is relevant	17	65.38	9	34.61					26	99.99
Information is a lesson summary	17	65.38	9	34.61					26	99.99
<u>Concepts</u>										
Information is clear	20	76.92	3	11.54	3	11.54			26	100.
Information is accurate	18	69.23	8	30.77					26	100.
Information is supported by the generalization	20	76.92	5	19.23	1	3.84			26	99.99
Information is relevant to the lesson plan	15	57.69	9	34.61	2	7.69			26	99.99

Table 6 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Learning Experiences</u>										
Are appropriate for reaching the class objective	13	50.00	6	23.08	7	26.92			26	100.
Are familiar to participants	16	61.54	4	15.38	6	23.08			26	100.
Provide for participants' involvement in the learning process	19	73.08	2	7.69	5	19.23			26	100.
Are relevant to participants' needs and problems	19	73.08	2	7.69	5	19.23			26	100.
Are suited to the participants' interests	19	73.08	2	7.69	5	19.23			26	100.
Are suited to the participants' educational level	18	69.23	2	7.69	5	19.23	1	3.84	26	99.99

Table 6 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Teaching Aids</u>										
Are appropriate for reaching the class objective	15	57.69	7	26.92	4	15.38			26	99.99
Are relevant to the class content	15	57.69	6	23.08	3	11.54	2	7.69	26	100.
Stimulate learning	15	57.69	8	30.77	2	7.69	1	3.84	26	99.99
Are suited to the participants' interests	17	65.38	6	23.08	3	11.54			26	100.
Are suited to the participants' educational level	17	65.38	6	23.08	3	11.54			26	100.
<u>Evaluation</u>										
Is clearly stated	20	76.92	6	23.08					26	100.
Is appropriate to the participants' educational level	16	61.54	10	38.46					26	100.

Note. SA - Strongly Agree
 A - Agree
 U - Undecided

SD - Strongly Disagree
 D - Disagree
 NR - No Response

Learning experiences. Fifty percent of the respondents claimed learning experiences were not appropriate for reaching the class objectives. In addition, some respondents (around 40 percent) indicated that the learning experience concerned with a simulation game aimed at showing the relationship between family size and family housing resources was not familiar to participants and was difficult to grasp, given the educational level of participants.

Three learning experiences were suggested for the revised lesson plan. In the first activity, a class discussion, participants are guided to infer the relationship between family size and family housing resources by observing two contrasting pictures showing the distribution of housing resources in a small and a large family.

The second activity deals with an interview in which two volunteer women who have large and small families talk about their experiences of living in a housing project. This activity seeks to reinforce previous knowledge about the relationship between family housing needs, housing resources, and family size by letting participants get acquainted with concrete experiences which are familiar to them and relevant to their needs and problems.

The third activity is a case story concerning the issue of family size, housing resources, and family planning. The activity seeks to encourage some thinking about the need for family planning in order to maintain a balance between family size and housing resources.

Teaching aids. Teaching aids like other parts of this lesson plan were not appropriate for reaching class objectives, as more than

30 percent of respondents claimed. Moreover, teaching aids were judged to be irrelevant to the class content, and unable to stimulate learning.

Two teaching aids for the revised lesson were suggested. One was a bulletin board illustrating with pictures the alleged relationship between family housing needs, housing resources, and family size. The other was a poster portraying a couple with a house as background. The message conveys the idea of family planning as it is related to housing resources.

Lesson 3: Effect of Overpopulation Upon The Quality of Community Housing

This lesson explores the impact of rapid population increase upon the quality of community housing, and suggests ways of improving the quality of housing. The lesson was designed in response to a suggestion brought up in the evaluation, as some respondents indicated the need to discuss population increase and its impact on housing in more detail. Therefore, this lesson did not go through the evaluation procedure like the rest of the lessons, but was revised by three volunteer home economists who were willing to cooperate in the second revision of some of the lessons.

Behavioral objectives. Three behavioral objectives were stated for this lesson. The first is aimed at seeking participants' understanding of the population increase problem and how it affects housing. The second and third objectives are aimed at developing feelings of adequacy, so that participants feel that they can take the initiative in an effort to improve the family's quality of housing.

Learning experiences. Three learning experiences were designed to match the objectives. The first activity is concerned with a lecture in which participants get acquainted with community housing problems related to overpopulation. In the second activity, participants are led to apply previous knowledge by discovering ways to improve housing conditions. Next, participants engage in a demonstration aimed at showing them how poor housing conditions can be improved. Finally, participants engage in home projects, the main purpose of which is to foster in participants feelings of adequacy, so that they feel that they themselves can change poor housing conditions into better ones.

Clothing

The teaching unit on clothing dealt with a child's clothing needs and their relationship to family size. The basic content of the unit referred to the child's needs in terms of clothing. In fact, clothing plays an important role in enhancing a child's health and protection as well as fulfilling his social and psychological needs.

Family resources for the provision of clothing are related to the size of the family; in other words, if the size of the family increases, families must increase the resources allotted for clothing needs as well. The economic problems of low-income families becomes worse when the size of the family increases without any planning; therefore, the limited income is destined to cover food expenses and little money is left for clothing and other life necessities.

Family planning must be adopted if low-income families are to maintain a balance between family size and family resources for the provision of clothing. Also, families can help themselves by engaging in practices tending to improve the quality of children's clothing.

The original teaching unit included five general objectives and two lesson plans; the revised version presented four general objectives and two lesson plans. These changes and amendments suggested in the evaluation are discussed next.

General Objectives for the Unit

Five general objectives were stated for the original teaching unit. Overall, they were assigned positive ratings in the rating scale, as most respondents agreed with the criteria established for good instructional objectives (see Table 7). However, objectives were revised as a few respondents suggested that the wording of the statements seemed rather vague. Moreover, one of the objectives dealing with the limitations facing low-income families was removed, as this concept was implied in the objective dealing with the relationship between family size and family resources.

The following lessons were revised and adapted to the general objectives of the unit:

1. Children's Functional Clothing
2. Children's Clothing Needs, Family Resources, and Family Size.

Table 7
 Clothing: Lesson 1, Children's
 Functional Clothing

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Unit General Objectives</u>										
Are clearly stated	22	84.61	2	7.69	2	7.69			26	99.99
Can be achieved	18	69.23	6	23.08	2	7.69			26	100.
<u>Behavioral Objectives</u>										
Are clearly stated	22	84.61	2	7.69	2	7.69			26	99.99
Clearly determine the lesson content	24	92.31	2	7.69					26	100.
Clearly determine the learning experience	23	88.46	3	11.54					26	100.
Clearly determine the evaluation procedure	20	76.92	6	23.08					26	100.
Can be achieved	20	76.92	3	11.54	2	7.69	1	3.84	26	99.99

Table 7 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Generalization</u>										
Information is accurate	25	96.15	1	3.84					26	99.99
Information is relevant	25	96.15	1	3.84					26	99.99
Information is a lesson summary	23	88.46	3	11.54					26	100.
<u>Concepts</u>										
Information is clear	24	92.31	2	7.69					26	100.
Information is accurate	24	92.31	2	7.69					26	100.
Information is supported by the generalization	22	84.61	4	15.38					26	99.99
Information is relevant to the lesson plan	24	92.31	2	7.69					26	100.

Table 7 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Learning Experiences</u>										
Are appropriate for reaching the class objective	21	80.77	5	19.23					26	100.
Are familiar to participants	18	69.23	8	30.77					26	100.
Provide for participants' involvement in the learning process	24	92.31	2	7.69					26	100.
Are relevant to participants' needs and problems	23	88.46	3	11.54					26	100.
Are suited to the participants' interests	20	76.92	6	23.08					26	100.
Are suited to the participants' educational level	18	69.23	6	23.08			2	7.69	26	100.

Table 7 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Teaching Aids</u>										
Are appropriate for reaching the class objective	23	88.46	3	11.54					26	100.
Are relevant to the class content	23	88.46	3	11.54					26	100.
Stimulate learning	21	80.77	5	19.23					26	100.
Are suited to the participants' interests	20	76.92	6	23.08					26	100.
Are suited to the participants' educational level	17	65.38	9	34.61					26	99.99
<u>Evaluation</u>										
Is clearly stated	20	76.92	6	23.08					26	100.
Is appropriate to the participants' educational level	17	65.38	9	34.61					26	99.99

Note. SA - Strongly Agree
A - Agree
U - Undecided

SD - Strongly Disagree
D - Disagree
NR - No Response

Lesson 1: Children's Functional Clothing

The content of the original lesson dealt with functions of children's clothing and ways of improving the quality of their clothing. Few changes were introduced in the original lesson since most respondents agreed with most of the criteria established for each part of the lesson.

The major change suggested by respondents referred to the scope of the lesson; it was claimed that the practical part of the lesson which dealt with improving the quality of children's clothing was more closely related to the scope of the second lesson dealing with the relationship between family resources for clothing and family size. Therefore, the scope of the revised lesson focused only on the functions of clothing. Some parts of the original lesson were revised in order to adjust them to the scope of the revised lesson (see Table 7).

Behavioral objectives. Two behavioral objectives were stated in the original lesson, to which most respondents assigned positive ratings in the rating scale, according to the criteria established.

Revision of the objectives was necessary in order to adapt them to the scope of the revised lesson. Therefore, the objective dealing with ways to improve the quality of children's clothing was transferred to another lesson, while the remaining objective was subjected to revision of the wording. The behavioral objective of the revised lesson pursues participants' understanding of the functions of clothing in fulfilling a child's needs for protection, security, comfort, and attractiveness.

Learning experiences. Three learning experiences were designed for the original lesson, and most respondents agreed with the criteria established for appropriate learning experiences. However, the revision of the learning experiences was imperative in order to match them with the behavioral objective of the revised lesson. The major change was concerned with the removal of a learning experience dealing with individual home projects as this activity became the subject matter of a different lesson.

The revised lesson includes three learning experiences. In the first activity, the teacher endeavors to raise interest in the lesson topic by narrating the case of the poorly dressed girl. In the second activity, about a fashion show in which participants' children cooperate, the class members are expected to observe clothing features that stand for functional clothing. The third activity deals with a small group activity in which participants are encouraged to apply previous knowledge by identifying functional and nonfunctional features in children's clothing.

Teaching aids. Teaching aids like learning experiences were assigned positive ratings in the rating scale, but revision was necessary in order to match them with behavioral objectives and learning experiences.

The revised teaching aids included a variety of displays of real items and pictures illustrating children's clothing, pointing out their functional requirements. In addition, subject matter is enhanced by pictures illustrating the functionality of children's clothing, according to the climate and stage of development.

Lesson 2: Children's Clothing Needs,
Family Resources, and Family Size

This lesson explores the relationship between family resources needed for the provision of clothing and family size, and discusses the need for family planning if poor families are to maintain a balance between family size and family resources. Along with family planning, the lesson discusses ways of improving the quality of children's clothing. Some of the changes and amendments suggested in the evaluation of this lesson are discussed next (see Table 8).

Behavioral objectives. The original lesson included two behavioral objectives, both dealing with family resources for clothing and relationship to family size. In general, objectives were assigned positive ratings in the rating scale except for one item in which around 40 percent of respondents claimed that objectives were not clearly stated. The revision of the objectives took into account not only the evaluation results but the scope of the revised lesson.

The revised lesson plan included four behavioral objectives. Their aim is to help participants understand that the distribution of family resources for clothing varies according to the size of the family, and that families can take initiative in solving their problems by planning the size of the family accordingly, and by engaging in activities aimed at improving the quality of children's clothing.

Learning experiences. The original lesson included two learning experiences. More than 60 percent of respondents agreed with the criteria established for good learning experiences. However, one of

Table 8

Clothing: Lesson 2, Children's Clothing Needs,
Family Resources, and Family Size

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Unit General Objectives</u>										
Are clearly stated	20	76.92	3	11.54	3	11.54			26	100.
Can be achieved	20	76.92	6	23.08					26	100.
<u>Behavioral Objectives</u>										
Are clearly stated	15	57.69	4	15.38	6	23.08	1	3.84	26	99.99
Clearly determine the lesson content	20	76.92	3	11.54	3	11.54			26	100.
Clearly determine the learning experience	17	65.38	3	11.54	4	15.38	2	7.69	26	99.99
Clearly determine the evaluation procedure	18	69.23	2	7.69	6	23.08			26	100.
Can be achieved	24	92.31	2	7.69					26	100.

Table 8 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Generalization</u>										
Information is accurate	24	92.31	2	7.69					26	100.
Information is relevant	23	88.46	2	7.69	1	3.84			26	99.99
Information is a lesson summary	23	88.46	3	11.54					26	100.
<u>Concepts</u>										
Information is clear	20	76.92	5	19.23	1	3.84			26	99.99
Information is accurate	18	69.23	6	23.08	2	7.69			26	100.
Information is supported by the generalization	20	76.92	5	19.23	1	3.84			26	99.99
Information is relevant to the lesson plan	18	69.23	5	19.23	1	3.84	2	7.69	26	99.99

Table 8 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Learning Experiences</u>										
Are appropriate for reaching the class objective	20	76.92	3	11.54	3	11.54			26	100.
Are familiar to participants	16	61.54	8	30.77	2	7.69			26	100.
Provide for participants' involvement in the learning process	18	69.23	5	12.23	3	11.54			26	100.
Are relevant to participants' needs and problems	18	69.23	6	23.08			2	7.69	26	100.
Are suited to the participants' interests	18	69.23	5	19.23	1	3.84	2	7.69	26	99.99
Are suited to the participants' educational level	20	76.92	6	23.08					26	100.

Table 8 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Teaching Aids</u>										
Are appropriate for reaching the class objective	13	50.00	3	11.54	10	38.46			26	100.
Are relevant to the class content	13	50.00	6	23.08	7	29.62			26	100.
Stimulate learning	16	61.54	6	23.08	4	15.38			26	100.
Are suited to the participants' interests	17	65.38	7	26.92	2	7.69			26	99.99
Are suited to the participants' educational level	17	65.38	9	34.61					26	99.99
<u>Evaluation</u>										
Is clearly stated	15	57.69	11	42.31					26	100.
Is appropriate to the participants' educational level	15	57.69	11	42.31					26	100.

Note. SA - Strongly Agree
 A - Agree
 U - Undecided

SD - Strongly Disagree
 D - Disagree
 NR - No Response

the activities was concerned with clothing construction in which participants were to assess the amount of time, energy, and money expended in making clothes for their children. This activity was removed since a few respondents indicated it was time consuming and perhaps many poor participants could not afford the materials needed for the class. The remaining activity, concerned with a simulation game, along with three new activities, comprises the learning experiences of the revised lesson.

The purpose of the first activity is to get the group interested in the class topic by continuing the case story of the little girl discussed in the previous lesson. The second activity deals with a simulation game which seeks to demonstrate that distribution of resources for the provision of clothing varies with the size of the family. In the third activity, a class discussion, participants identify their own problems with regard to the provision of clothing, and discuss some ways they can help to solve the problem, one of which is the need for family planning. The last activity seeks to involve participants in individual home projects aimed at improving the quality of children's clothing.

Teaching aids. Around 50 percent of the respondents indicated that the teaching aids were not appropriate for teaching the class objectives and were not relevant to the class content. Moreover, the teaching aids were judged by around 40 percent of respondents as lacking the power to stimulate learning.

Therefore, teaching aids underwent thorough revision, and three new teaching aids were incorporated in the revised lesson. These

include a chart illustrating how the distribution of resources for provision of clothing is affected by the size of the family. Illustrated ideas on how to improve children's wardrobes and a poster showing a small family properly dressed convey the idea that family planning helps families to provide for children's clothing needs.

Child Development and Family Relationships

The area of child development and family relationships dealt with child and family needs, and their relationship to family planning. The subject matter discussed in this unit maintains that healthy growth and development of a child are likely to occur when he lives in an environment where he can fulfill his physical, mental, social, and emotional needs.

Parents have a tremendous responsibility to guide their children toward healthy growth and development. Depending on the child-care practices they use to bring up their children, they may enhance or thwart their healthy growth.

The fact that parents do or do not plan the size of their families may influence the type of care and guidance a child receives. Thus, a planned child is a wanted child, and as such he is more likely to receive loving care from his parents than is his unplanned counterpart.

When parents plan the size of their family, they also benefit as they may face fewer financial difficulties and less emotional tension caused by heavy responsibilities, resulting in a better quality of life for the whole family unit.

The advantages of family planning are extended to the community inasmuch as certain social problems such as child abandonment, child desertion, and child employment are highly related to irresponsible parenthood. Therefore, responsible parenthood implies better quality of life for the community members as well.

Five general objectives were formulated for the original teaching unit, and three lesson plans were designed to meet the objectives. Revision of the teaching unit based on the evaluation, resulted in four general objectives and four lesson plans. Changes and amendments suggested on the evaluation are discussed next.

General Objectives of the Unit

Five general objectives were formulated in the original lesson. More than 60 percent of the respondents agreed that they were clearly stated and could be achieved. Nevertheless, a few respondents suggested some changes that were considered relevant to improvement of the teaching unit (see Table 9).

The respondents indicated that (1) the objective implying that child care is affected by the size of the family needed to be clarified; (2) the objective stating that a child's healthy growth is highly dependent on the availability of community services should be removed; and (3) the concept relating to quality of life in the community and its relationship to family size should be included as one of the objectives.

Based on these suggested changes, three general objectives were formulated for the revised teaching unit. Thus, the following revised lessons were adapted to the general objectives of the unit:

Table 9

Child Development and Family Relationships: Lesson 1
Developmental Needs of Children

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Unit General Objectives</u>										
Are clearly stated	21	80.77	4	15.38	1	3.84			26	99.99
Can be achieved	19	73.08	6	23.08	1	3.84			26	100.
<u>Behavioral Objectives</u>										
Are clearly stated	21	80.77	2	7.69	3	11.54			26	100.
Clearly determine the lesson content	22	84.61	4	15.38					26	99.99
Clearly determine the learning experience	20	76.92	6	23.08					26	100.
Clearly determine the evaluation procedure	19	73.08	4	15.38	3	11.54			26	100.
Can be achieved	16	61.54	10	38.46					26	100.

Table 9 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Generalization</u>										
Information is accurate	25	96.15	1	3.84					26	99.99
Information is relevant	25	96.15	1	3.84					26	99.99
Information is a lesson summary	19	73.08	6	23.07	1	3.84			26	99.99
<u>Concepts</u>										
Information is clear	16	61.54	3	11.54	7	26.92			26	100.
Information is accurate	22	84.61	4	15.38					26	99.99
Information is supported by the generalization	19	73.08	3	11.54	4	15.38			26	100.
Information is relevant to the lesson plan	20	76.92	5	19.23	1	3.84			26	99.99

Table 9 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Learning Experiences</u>										
Are appropriate for reaching the class objective	19	73.08	6	23.07	1	3.84			26	99.99
Are familiar to participants	22	84.61	3	11.54	1	3.84			26	99.99
Provide for participants' involvement in the learning process	22	84.61	3	11.54	1	3.84			26	99.99
Are relevant to participants' needs and problems	22	84.61	2	7.69	2	7.69			26	99.99
Are suited to the participants' interests	19	73.08	6	23.08	1	3.84			26	100.
Are suited to the participants' educational level	20	76.92	5	19.23	1	3.84			26	99.99

Table 9 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Teaching Aids</u>										
Are appropriate for reaching the class objective	22	84.61	3	11.54	1	3.84			26	99.99
Are relevant to the class content	19	73.08	4	15.38	3	11.54			26	100.
Stimulate learning	22	84.61	3	11.54	1	3.84			26	99.99
Are suited to the participants' interests	20	76.92	5	19.23	1	3.84			26	99.99
Are suited to the participants' educational level	20	76.92	5	19.23	1	3.84			26	99.99
<u>Evaluation</u>										
Is clearly stated	25	96.15	1	3.84					26	99.99
Is appropriate to the participants' educational level	22	84.61	4	15.38					26	99.99

Note. SA - Strongly Agree
A - Agree
U - Undecided

SD - Strongly Disagree
D - Disagree
NR - No Response

1. Developmental Needs of Children
2. Family Planning and Its Relationship to Child Development
3. Family Planning and Quality of Life of the Family
4. Family Planning and Quality of Life of the Community

Lesson 1: Developmental Needs of Children

One of the major recommendations made by respondents referred to the scope of the lesson dealing with developmental needs of children. They stated that the lesson content was too broad to cover in one class, and suggested deletion of the subject matter related to community resources.

The revised lesson explores the developmental needs of children and the parents' role in guiding the child toward healthy growth and development. Changes and amendments are discussed next (see Table 9).

Behavioral objectives. Five behavioral objectives were formulated for the original lesson. Over 70 percent of the respondents assigned positive ratings to all the criteria concerning behavioral objectives, except the last one stating that objectives could be achieved. Over 38 percent of the respondents claimed that the behavioral objectives were covering extensive and rather complex subject matter, and suggested deleting two objectives dealing with community resources and their effects on children's growth.

The revised lesson included three behavioral objectives. According to these, participants are expected to understand the developmental needs of children, to understand that a child's healthy growth

and development are fostered by adequate child-caring practices, and to engage in one positive child-care practice at home.

Learning experiences. More than 70 percent of the respondents assigned positive ratings to all the items concerning learning experiences, but it was necessary to remove the activities concerning community resources since subject matter related to these experiences was removed from the scope of the lesson.

The revised lesson included four learning experiences. In the first activity, participants observe pictures of children engaged in different activities and interpret their meaning. The second activity is a class discussion in which participants talk about their personal experiences in childrearing. The activity is intended to explore child-care practices and detect problems regarding child care and guidance. The third activity is a lecture about a child's developmental needs and explores how parents can, by using positive child-care practices, help the child to develop healthily. The last activity is concerned with child-care home projects which encourage participants to adopt positive child-care practices. An optional activity is concerned with a toy-making workshop.

Teaching aids. Teaching aids of the original lesson, which were assigned positive ratings in the rating scale, remained unchanged in the revised lesson. However, two new audiovisual aids were added to the original list making a total of five teaching aids. These included illustrative materials representing the child's developmental needs and milestones in progress through the first years of life, pamphlets related to child care, and films and slides

appropriate for illustrating the lecture. Also included was a display of toys with their corresponding description of their functions in child growth and development.

Lesson 2: Family Planning and Its Relationship to Child Development

This lesson, which was originally entitled family size and quality of child care, was subjected to thorough revision since several respondents claimed that the lesson content maintaining that large families do not take as good care of their children as small families do, was invalid and inaccurate. The author considered that the lesson content could stress the idea that families who do plan the size of the family are likely to provide for the physical as well as the social and psychological needs of children because planning of births is based on the availability of family resources as well as parents' willingness to have children to care for and to love. The opposite situation would apply to large families which often are the result of unplanned births.

The original lesson title, family size and quality of child care, was replaced by the present one, family planning and its relationship to child development, for the purpose of making it more consistent with the revised lesson content. Some changes introduced in the different parts of the lesson are discussed next (see Table 10).

Behavioral objectives. Over 60 percent of the respondents indicated that the behavioral objectives fulfilled the requirements

Table 10

Child Development and Family Relationships: Lesson 2
 Family Planning and Its Relationship to
 Child Development

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Unit General Objectives</u>										
Are clearly stated	19	73.08	6	23.08	8	3.84			26	100.
Can be achieved	16	61.54	6	23.08	3	11.54	1	3.84	26	100.
<u>Behavioral Objectives</u>										
Are clearly stated	20	76.92	3	11.54	3	11.54			26	100.
Clearly determine the lesson content	22	84.61	1	3.84	3	11.54			26	99.99
Clearly determine the learning experience	20	76.92	3	11.54	2	7.69	1	3.84	26	99.99
Clearly determine the evaluation procedure	16	61.54	6	23.08	1	3.94	3	11.54	26	100.
Can be achieved	23	88.46	1	3.84	2	7.69			26	99.99

Table 10 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Generalization</u>										
Information is accurate	15	57.69	5	19.23	6	23.07			26	99.99
Information is relevant	15	57.69	8	30.77	3	11.54			26	100.
Information is a lesson summary	18	69.23	5	19.23	3	11.54			26	100.
<u>Concepts</u>										
Information is clear	18	69.23	5	19.23	2	7.69	1	3.84	26	99.99
Information is accurate	14	53.84	7	26.92	5	19.23			26	99.99
Information is supported by the generalization	18	69.23	5	19.23	2	7.69	1	3.84	26	99.99
Information is relevant to the lesson plan	20	76.92	6	23.07					26	99.99

Table 10 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Learning Experiences</u>										
Are appropriate for reaching the class objective	18	69.23	5	19.23	3	11.54			26	100.
Are familiar to participants	20	76.92	3	11.54	3	11.54			26	100.
Provide for participants' involvement in the learning process	20	76.92	3	11.54	3	11.54			26	100.
Are relevant to participants' needs and problems	17	65.38	3	11.54	3	11.54	3	11.54	26	100.
Are suited to the participants' interests	17	65.38	6	23.08	3	11.54			26	100.
Are suited to the participants' educational level	18	69.23	5	19.23	1	3.84	2	7.69	26	99.99

Table 10 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Teaching Aids</u>										
Are appropriate for reaching the class objective	17	65.38	6	23.08	3	11.54			26	100.
Are relevant to the class content	20	76.92	3	11.54	3	11.54			26	100.
Stimulate learning	17	65.38	6	23.08	3	11.54			26	100.
Are suited to the participants' interests	20	76.92	3	11.54			3	11.54	26	100.
Are suited to the participants' educational level	20	76.92	3	11.54	1	3.84	2	7.69	26	99.99
<u>Evaluation</u>										
Is clearly stated	23	88.46	1	3.84	2	7.69			26	99.99
Is appropriate to the participants' educational level	20	76.92	3	11.54	3	11.54			26	100.
<u>Note.</u> SA - Strongly Agree										
A - Agree										
U - Undecided										
SD - Strongly Disagree										
D - Disagree										
NR - No Response										

described in the rating scale. However, a revision was necessary in order to make them consistent with the concept of the lesson.

Two behavioral objectives were stated for the revised lesson. Their ultimate purpose is to help participants understand why being born in a planned family is likely to enhance a child's healthy growth, while unplanned birth may impair the child's development.

Generalization and concepts. The generalization and concepts reflected the inaccuracy of the content covered in the original lesson. Less than 50 percent of the respondents either disagreed on or doubted the accuracy and relevance of the generalization and concepts. Both generalization statement and concepts were restated according to the revised content of the lesson.

Learning experiences. Over 60 percent of the respondents assigned positive ratings to criteria describing learning experiences, but as with the rest of the lesson, learning experiences were revised to assure that they were suited to the revised lesson content and behavioral objectives.

A major concern of a few respondents was whether learning activities were suited to the needs and interests of the participants. They specifically referred to the activity concerning a group discussion in which participants with large and small families were encouraged to share their personal experiences with regard to child-rearing. Respondents indicated that a comparison of childrearing practices which would lead the class to conclude that children from large families receive inadequate care would probably cause hurt for women with a large number of children.

The revised lesson includes three learning experiences. The first is an introductory activity aimed at getting group interest in the class topic. The second deals with a case story in which participants are expected to identify the problems faced by children of poor and unplanned families. In the third activity, a class discussion, participants discuss why planning the size of the family and spacing children are likely to favor a child's healthy growth and development.

Teaching aids. Teaching aids were revised to make them consistent with the revised content of the lesson. Teaching aids of the revised lesson include posters and pamphlets related to family planning and child spacing. One of the posters, illustrating a planned and spaced family, conveys the message that parents should have only wanted children that they can love and take good care of.

Lesson 3: Family Planning and Quality of Life of the Family

This lesson explores the benefits of family planning for all family members, as well as the relationship between family planning and the family's quality of life. Changes and amendments suggested for this lesson are discussed next (see Table 11).

Behavioral objectives. One behavioral objective was stated in the original lesson. More than 40 percent of respondents either doubted or disagreed that this objective fulfilled the requirements of good behavioral objectives. Therefore, the original objective was revised, and two new behavioral objectives were formulated for the revised lesson.

Table 11

Child Development and Family Relationships: Lesson 3

Family Planning and Quality of

Life of the Family

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Unit General Objectives</u>										
Are clearly stated	15	57.69	5	19.23	6	23.08			26	100.
Can be achieved	15	57.69	6	23.08	5	19.23			26	100.
<u>Behavioral Objectives</u>										
Are clearly stated	15	57.69	3	11.54	8	30.77			26	100.
Clearly determine the lesson content	15	57.69	5	19.23	4	15.38	2	7.69	26	99.99
Clearly determine the learning experience	15	57.69	3	11.54	5	19.23	3	11.54	26	100.
Clearly determine the evaluation procedure	15	57.69	3	11.54	5	19.23	3	11.54	26	100.
Can be achieved	15	57.69	3	11.54	5	19.23	3	11.54	26	100.

Table 11 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Generalization</u>										
Information is accurate	17	65.38	4	15.38	5	19.23			26	99.99
Information is relevant	17	65.38	6	23.08	3	11.54			26	100.
Information is a lesson summary	16	61.54	6	23.08	4	15.38			26	100.
<u>Concepts</u>										
Information is clear	18	69.23	7	26.92	1	3.84			26	99.99
Information is accurate	17	65.38	8	30.77	1	3.84			26	99.99
Information is supported by the generalization	16	61.54	4	15.38	3	11.54	3	11.54	26	100.
Information is relevant to the lesson plan	20	76.92	6	23.08					26	100.

Table 11 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Learning Experiences</u>										
Are appropriate for reaching the class objective	19	73.08	1	3.84	3	11.54	3	11.54	26	100.
Are familiar to participants	16	61.54	7	26.92	3	11.54			26	100.
Provide for participants' involvement in the learning process	18	69.23	5	19.23	3	11.54			26	99.99
Are relevant to participants' needs and problems	19	73.08	6	23.08			1	3.84	26	100.
Are suited to the participants' interests	19	73.08	6	23.08			1	3.84	26	100.
Are suited to the participants' educational level	17	65.38	9	34.61					26	99.99

Table 11 (Continued)

Item Description	SA & A		U		SD & D		NR		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<u>Teaching Aids</u>										
Are appropriate for reaching the class objective	17	65.38	3	11.54	6	23.08			26	100.
Are relevant to the class content	17	65.38	6	23.08	3	11.54			26	100.
Stimulate learning	17	65.38	6	23.08	3	11.54			26	100.
Are suited to the participants' interests	17	65.38	6	23.08	2	7.69	1	3.84	26	99.99
Are suited to the participants' educational level	18	69.23	8	30.77					26	100.
<u>Evaluation</u>										
Is clearly stated	20	76.92	6	23.08					26	100.
Is appropriate to the participants' educational level	17	65.38	6	23.08	2	7.69	1	3.84	26	99.99

Note. SA - Strongly Agree
 A - Agree
 U - Undecided

SD - Strongly Disagree
 D - Disagree
 NR - No Response

According to these objectives, participants are expected to understand that family planning brings benefits for parents and children, and that family planning is related to the quality of life of the family.

Learning experiences. The original lesson included one learning experience dealing with role-playing to which more than 60 percent of the respondents assigned positive ratings in a rating scale. Along with a role-playing activity, three new learning experiences were designed for the revised lesson.

In the first activity participants are expected to react to a picture illustrating the quality of life of the family, and discuss the meaning of quality of life. The second activity deals with a role-playing activity in which the problems of an unplanned family and the quality of life reached by a planned family are enacted. Participants are encouraged to compare and contrast the family life situations of the two families and eventually conclude that family planning helps families to reach a good quality of life. The third activity deals with a conference on family-planning practices conducted by a doctor or nurse. Participants are encouraged to ask questions and clarify misconceptions. The last experience is a small group activity in which participants express the meaning of quality of life through a collage work. The purpose of this activity is to reinforce concepts and clarify values.

Teaching aids. Over 60 percent of the respondents assigned positive ratings to the teaching aids. Therefore, no substantial

changes were introduced in this part of the lesson. A new teaching aid was suggested, which would be a display of family-planning materials including posters, pamphlets, and contraceptives that could be arranged by people of the nearest Family-Planning Center.

Lesson 4: Family Planning and Quality of Life of the Community

This lesson was formulated in response to one of the major suggestions made by respondents who pointed out the need to include a concept related to quality of life of the community and its relationship to family size. The new lesson would attain one of the goals of family-planning education that states the importance of family planning in enhancing the quality of life of the individual, the family, and the community.

The lesson explores some of the problems that affect the quality of life of the community that are linked to irresponsible parenthood. This lesson like other new lessons was reevaluated by a team of three Colombian home economist volunteers.

Behavioral objectives. Three behavioral objectives were formulated for this lesson. Their ultimate purpose is to lead participants to recognize social problems that are linked to irresponsible parenthood, to understand how these problems affect the quality of life of the community, and to understand that family planning can enhance the quality of life of the community.

Learning experiences. Three learning experiences were devised for this lesson. The first activity is intended to interest participants in the class topic by encouraging them to observe pictures or

photographs of the community and think how they can help to improve the living conditions of the community.

The second activity is a group discussion in which participants are encouraged to talk about community problems that affect the quality of life of the community. Participants identify which of those problems are linked with irresponsible parenthood and discuss how family planning can help to decrease community problems of such nature.

The third activity deals with an illustrated conference given by a social worker on community problems related to irresponsible parenthood. The purpose of this activity is to acquaint participants with real data, and reinforce previous knowledge.

Teaching aids. Teaching aids suggested for this lesson include several posters depicting community problems that are associated with lack of family planning and emphasizing the importance of family planning in enhancing the quality of life of the community. Another poster illustrates a healthy-looking family with a community as a background. The message this tries to convey is that happy families can make happy communities.

Feasibility and Applicability of the Family- Planning Teaching Model

The second section of this study referred to a general evaluation of the family-planning teaching model to test its feasibility and applicability. Five criteria were established to examine whether or not the teaching model was suited to Colombian adult education

programs, namely home economics programs carried out by government and private institutions.

The general evaluation of the teaching model was conducted by a team of 20 Colombian home economics students and home economics professionals, who carried out the second section of the evaluation after they had completed individual evaluations of 11 lesson plans. The American team, made up of six home economics students at the University of North Carolina at Greensboro who cooperated in the first part of the evaluation by responding to 11 lesson plans, did not participate in the general evaluation of the teaching model. This decision stemmed from the fact that American students were not familiar with Colombian conditions, and therefore did not have the background to judge whether the teaching model could be integrated into Colombian programs or whether it was suited to participants' needs, problems, interests, and educational level. Indeed, the American students were aware of this limitation while they were engaged in the evaluation task of the individual lessons; at that time, they expressed doubts or were undecided when they encountered statements related to the needs, problems, interests, and educational background of participants.

For the evaluation of the teaching model, evaluators were furnished with a rating scale instrument consisting of five statements to be judged against a five-point scale ranging from "strongly agree" to "strongly disagree."

The Content: Its Relevance to
Home Economics Programs

One hundred percent of the respondents agreed that family-planning education content could be integrated into existing Colombian home economics programs. In fact, Colombian public and private institutions offered nationwide and local programs aimed at improving the living conditions of large segments of the population in the low socioeconomic level

Government institutions such as the Colombian Institute of Agriculture (ICA) offered nationwide programs in home economics designed to improve the living conditions of the rural family. Equally important is the outstanding program offered by the Colombian Institute of Family Welfare which presents programs in home economics to both rural and urban families. The programs of these two leading institutions offer training to youths and adults in the areas of nutrition and health, family-life education (Child Development and Family Relations), housing, clothing, home improvement, and arts and crafts.

There are also numerous institutions at both official and private levels which offer programs in home economics at the regional level. Among those are Social Security agencies, the Regional Federation of Coffee Growers, factories, and others.

Home economist professionals were chosen to evaluate the teaching model instead of home agents working for the Colombian Institute of Agriculture as was previously proposed. This switch was positive for two reasons. First, home economist professionals worked at top

levels in programming and supervision; therefore, they were more familiar with the programs of the Institution. Secondly, the professionals who cooperated in the study were engaged in a variety of institutions both at public and private levels, and consequently, opinions and remarks were not limited to a particular group of respondents.

A few Colombian respondents were critical of the fact that specific units were not sufficient to cover a given area of home economics. They indicated there was "very important material missing." Evidently, respondents were misled since the purpose of population education seeks not to create new programs but to integrate teaching units into existing programs. Moreover, the fact that teaching units are channeled through different programs broadens the possibilities that the family-planning message is going to reach numerous and complex audiences.

The Content: Its Relevance to
Participants' Needs and Problems

The family-planning teaching model was designed to reach low-income groups of both urban and rural areas. One hundred percent of the respondents found that the teaching content was suitable to the needs, problems, and interests of prospective participants.

Each one of the teaching units explores problems related to human life necessities. The needs for food, clothing, and shelter are common to most people of the lower socioeconomic levels, and the fact that they are basic life necessities makes people strive to satisfy them in order to survive.

Some of the problems may be perceived by the learner and some may not, but the role of the teacher is to help people become aware of those unknown problems that are affecting their lives. For example, lower-class parents rear their children in the traditional way and may not be aware that the childrearing practices they are using are affecting the healthy growth and development of their children.

The approach used in the different teaching units was to encourage participants to explore their own situations and seek solutions to their particular problems. This approach is in accordance with their level of moral reasoning.

Teaching Methods

Eighty-five percent of the respondents agreed that teaching methods were practical and challenging while 15 percent were undecided about the applicability of certain methods. They specifically questioned the suitability of case stories and role playing to the educational level of participants.

Evidently, case stories and role playing are challenging learning experiences usually absent from traditional classrooms. These unaccustomed activities may have elicited some doubts among respondents. Most teaching methods suggested in the lessons were modern methods which provided for better involvement of the students in the learning process and added variety to classroom teaching. Thus, a great many class discussions, small-group discussions, demonstrations, case stories, and home projects were present in most teaching units. Role playing and simulation games were suggested to a lesser degree,

as these methods were not appropriate for all lessons. Conferences or talks were rarely suggested; however, in some cases they were necessary in order to present complex subject matter.

Teaching Aids

Eighty percent of the respondents agreed that teaching aids were practical and challenging while 20 percent were undecided. The latter group expressed the opinion that teaching aids should be more varied, suggesting the use of modern materials such as films and slides.

Films and slides were rarely suggested as teaching aids because they may not be available, or may be impossible to use in rural areas where electricity is nonexistent. Besides, these are very expensive teaching aids that many institutions may be unwilling to purchase. Most teaching aids suggested were materials that could be designed by the teacher, such as posters, bulletin boards, and flip charts.

The initial idea of the author was to design some teaching aids that could be used along with the lessons. Some materials were developed and pretested in the initial stage of this work, but feedback from Colombian judges was negative, indicating that the characters and background of pictures may not be suited to many audiences, taking into account the complexity of the Colombian population.

Language

Eighty-five percent of the respondents agreed that the language used in the lesson plans was suitable to the educational level of the participants; fifteen percent were undecided. It is difficult to

write for adults with low levels of education and different cultural backgrounds, but every effort was made to develop materials suitable for the prospective audiences. In fact, very few changes relative to language were made in the evaluation procedures of the different lessons (see Table 12).

Table 12
Feasibility and Applicability of the
Family-Planning Teaching Model

Item Description	SA & A		U		SD & D		TOTAL	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
The general content of family-planning education can be integrated into the home economics program of the institution.	20	100.00					20	100.00
Family-planning education content is relevant to the needs and problems of Colombian low-income groups.	20	100.00					20	100.00
Teaching methods are practical and challenging.	17	85.00	3	15.00			20	100.00
Teaching aids are practical and challenging.	16	80.00	4	20.00			20	100.00
The language is suitable to the participants' educational level as well as their socio-cultural context.	17	85.00	3	15.00			20	100.00

CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

In the late 1960's, the implementation of family-planning programs in Colombia became one of the major efforts toward lowering the country's high fertility rate. Since then, family-planning programs, comprised of both clinical services and educational campaigns, have reached large segments of the Colombian population, even in the most remote areas.

Despite the extent and magnitude of these family-planning programs, however, a large group of people at the lower socioeconomic levels remained reluctant to adopt family-planning practices. Such reluctance might be attributed to social, economic, psychological, and cultural barriers that prevent them from engaging in practices conducive to controlling their fertility. These considerations led the author to assume that changes in fertility behavior cannot be obtained unless people feel strongly motivated to control their fertility.

This study was an attempt to develop a motivational approach to family-planning education through the teaching of home economics. The rationale for a motivational approach lies in the need to inculcate high fertility groups with the idea that family planning is a necessary condition if the family is to attain the desired quality of life.

The three major components of the study were:

1. To design a model for teaching family planning through the following areas of home economics: nutrition and health, housing, clothing, and child development and family relations. The model seeks to introduce motivational appeals for family planning through the areas of home economics, and to introduce effective teaching methods appropriate to the educational level of the audiences and facilities of the educational settings.
2. To evaluate the usefulness and applicability of the family-planning teaching model.
3. To revise the teaching model and introduce the necessary changes suggested in the evaluation.

The review of literature provided the guidelines for the designing of the teaching model on family planning. The model's focus of study, its goals, objectives, content, and educational approach are within the framework of non-school population education programs (Kline & Keehn, 1973). The teaching model adopted the persuasion approach which was directed at inducing people to control their fertility. This approach is a controversial issue in population education (Viederman, 1972), but it has been accepted when family-planning education has been addressed to adult uneducated audiences from high fertility populations (Kline et al., 1976).

The use of motivational appeals is highly recommended as a means to persuade couples to plan the size of their family (Bogue, 1967; Zawacky, 1971).

The teaching model was comprised of 11 lessons within four teaching units corresponding to the four mentioned areas of home economics. Each lesson plan contained behavioral objectives, concepts and generalizations, learning experiences, teaching aids, and evaluation.

The evaluation instrument, a rating scale divided into two sections, consisted of a five-point scale ranging from "strongly agree" to "strongly disagree." The first section of the instrument, which consisted of 28 statements describing the quality of a good lesson plan, was used in the evaluation of each one of the lessons. The second section, consisting of five statements, was used in the assessment of the feasibility and applicability of the family-planning teaching model.

Evaluation procedures were performed by six home economics students of the University of North Carolina at Greensboro, nine home economics students of the University of Caldas in Colombia, and 11 home economics professionals of Colombia. The students of the University of North Carolina carried out only the first part concerning the evaluation of individual lesson plans. Colombian home economics students and professionals performed both parts of the evaluation.

Evaluation data were tabulated and analyzed descriptively. Lesson statements in which 60 percent or more of the respondents agreed were not subject to revision; lesson statements in which less than 60 percent of the respondents agreed were subject to revision.

Evaluation results were satisfactory in the sense that respondents did not limit their judgment of the lessons by choosing the appropriate ratings in the rating scale. Additionally, respondents contributed a great deal to the improvement of the teaching units by making suggestions or expressing viewpoints, all of which were given thoughtful consideration at the revision stage of the teaching model.

Changes and amendments to the lessons stemming from negative ratings were primarily concerned with revision of wording, precision, and clarity of behavioral objectives, reorganization of lesson contents, and consistency among behavioral objectives, learning experiences, teaching aids, and evaluation. Most of the lessons had minor revisions, and a few of them underwent substantial changes due to the lack of direction in the behavioral objectives, or lack of consistency among behavioral objectives, learning experiences, teaching aids, and evaluation. These lessons were rewritten and submitted to a team of three Colombian home economists who were willing to cooperate in a second revision.

The designing of additional lessons was perhaps the major change introduced in the teaching model. The planning of new lessons responded to the need to expand subject matter barely covered in the lesson contents, or to introduce subject matter that was missing in the teaching units. Three new lessons corresponding to the areas of nutrition and health, housing, and child development and family relations were submitted to a team of three Colombian home economists who were willing to evaluate the lessons. The feedback from respondents was positive for both new lessons and revised lessons that underwent substantial changes.

The second part of the evaluation, concerned with feasibility and applicability of the teaching model on family planning, showed positive results. Most of the respondents indicated that the subject matter dealing with family planning could be integrated into home economics programs of Colombian institutions. They also indicated that teaching methods were practical and challenging and that the content of the lessons was relevant to the needs, problems, and level of education of the prospective audiences of family-planning education programs.

The revised teaching model on family planning was composed of 14 lessons, discriminated as follows: five lessons on nutrition and health; three lessons on housing; two lessons on clothing; and four lessons on child development and family relations.

Conclusions

Two issues are involved in the effectiveness of this study: acceptance and implementation. Acceptance refers to the willingness of program officers to incorporate the teaching contents of family planning into the home economics programs of their institutions. Full acceptance and adoption of the teaching model are likely to occur because of its pattern of organization; independent teaching units instead of a complete course were designed to fit logically into existing home economics courses. This approach, as opposed to the single-course approach, has several advantages. First, the problem of incorporating a new course into an overcrowded curriculum is avoided; second, raising criticism from outsiders who tend to

perceive family-planning courses as fertility management or birth control is prevented; and third, the cost involved is kept to a minimum, because there is no need for extra teachers, extra physical facilities, and costly teaching aids.

The successful implementation of the teaching model is associated, to a certain extent, with the teachers' motivation for family-planning education, and their skill and ability in interpreting and transmitting the family-planning message. Both factors could be worked out through family-planning workshops offered by the sponsoring institution to all personnel in charge of the execution of the programs.

Finally, the evaluation, as an integral part of the implementation, is very important, because it provides the feedback needed to verify the applicability and usefulness of the program. The most important contribution that evaluation can make is to provide the feedback that enables objectives to be reformulated according to the needs and context of the program. The evaluation as a final assessment is also very desirable in order to determine to what extent the goals of the program have been achieved.

Recommendations

Based upon the conclusions, it is recommended that one of the Colombian institutions involved in population and family-planning education take the initiative in diffusing the family-planning teaching model. More specifically, the role of the sponsoring institution could be described as follows:

1. To make efforts to introduce the family-planning teaching model into the home economics programs of official and private institutions.
2. To allocate resources for printing a manual containing the information of the family-planning teaching model.
3. To organize family-planning workshops with the purpose of instructing the personnel engaged in home economics teaching--namely, home agents and field workers--in the proper use of the teaching model, providing information on family planning, and developing skills in the designing of teaching aids.
4. To plan periodic evaluations of the teaching model in order to assess its applicability and usefulness.
5. To provide the assistance required to meet the overall program needs.

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APPENDIX A
LESSON PLANS

AREA: Nutrition and Health

UNIT: Child and Family Nutritional Needs and Relationship to Family Size

GROUP: Lower class, urban and rural Colombian women

Objectives for the unit:

1. Understand the meaning of a healthy family diet.
2. Understand the importance of good nutrition in preserving the health of the mother and the child.
3. Understand the relationship between family food needs, family food supply, and family size.
4. Recognize different ways of improving the quality of the family diet.
5. Realize that low-income families have a need for family planning and child spacing as one of the ways to maintain or improve the quality of the family diet.

Lesson topics:

This unit includes the following lessons:

1. Healthy family diet.
2. Nutritional needs of the pregnant mother and her unborn child.
3. Nutritional needs of children.
4. Family food supply and family size.
5. Improving the quality of the family diet.

Lesson topic: Healthy Family Diet

Time: 2 Hours

Behavioral objectives:

Participants will:

1. Describe the nutritional value of a variety of foods.
2. Classify a variety of foods in three groups according to their nutritional value.
3. Explain the meaning of healthy family diet.
4. Give examples of healthy family diets using local foods.

Generalization:

A healthy family diet contains required amounts of body-building, protective, and energy foods.

Concepts:

1. A healthy family diet should contain a great variety of foods such as milk, dairy products, meat, poultry, fish, eggs, legumes, fruits, vegetables, and staple foods.
2. A group of foods such as milk, fish, meat, poultry, eggs, grain, provide the nutrients (protein) needed to grow and to repair the body. These are called body-building foods.
3. A variety of vegetables and fruits provide minerals and vitamins, which are necessary for growth, resistance to disease, and proper body functioning. These are called protective foods.
4. Foods such as cereals, plaintain, rice, bread, potatoes, fats, and sugar provide the energy to keep the body running. These are called energy foods.

5. A healthy family diet contains foods of the three groups of foods which every person needs to grow, to stay healthy, and to have energy to keep active.

Learning activities:

1. To get the group interested in the class topic, cut out or draw a picture of a healthy-looking family, and put it on the flannelgraph. Encourage participants to react to this picture by asking them:
 - What does this picture represent?
 - How does the family look?
 - What do you think could contribute to the health and appeal of this family?

Point out that all members of the family need to eat well to maintain their health and energy.

2. For this activity make a set of food cards of 10 x 10 cms. Include foods of the three groups. Cut out or draw pictures illustrating the functions of the three groups of foods. (Example: Show several children of different stages of development--baby, preschooler, teenager; a healthy-looking person; a family displaying activity--parents working and a child playing.) Prepare pictures and cards to be used on a flannelgraph.
 - Start the discussion by asking participants to suggest reasons why we eat. Write on a blackboard the reasons suggested by participants.

- Summarize the reasons given by participants by saying that we need food to grow and to repair the body, to keep healthy, and to have energy for keeping active. While mentioning the functions of foods, put on the flannelgraph the pictures illustrating these functions.
 - Explain the functions of foods.
 - Ask which kinds of foods are necessary for growth and body repair. If they mention foods of other groups of foods, explain the right functions of these foods. As participants list different kinds of foods, place the food cards below the picture illustrating a food function.
 - Emphasize that a healthy family diet should contain food from each of the three groups.
 - Ask participants to look at the flannelgraph, repeat the names of the foods, and explain their functions.
 - Remove all the food cards from the flannelgraph; sort them and distribute them among participants. Request that they come, one by one, by the flannelgraph, and place the food cards under the picture illustrating their corresponding functions. A survey of typical meals will follow.
3. Request several participants to describe a typical meal-- breakfast, lunch, and supper. Illustrate typical meals with food cards on a flannelgraph, or arrange a tray with a typical meal.

- Ask participants to identify foods of the three groups in each one of the meals.
 - If one or more food groups is not represented, ask participants to identify which food groups are lacking in the diet, and how the family health would be affected. Ask participants which other foods could be added to the original meal in order to have a balanced meal.
4. Involve participants in the planning of a meal. Gather a variety of foods needed for food preparation; follow the steps of a demonstration.
- Remember to get participants involved in the process of food preparation and serving.
 - Ask participants to assess the nutritional value of this meal. Why is this a healthy family meal?
 - It is important to introduce vegetable protein-rich foods such as soybeans, corn, and whole wheat. Plan and prepare foods containing vegetable protein; they are less expensive and healthy.

Teaching aids:

1. Display a chart with the Colombian group of foods. It is available at the National Institute of Nutrition.
2. Using a bulletin board, display samples of meals containing the three groups of foods. Cut out pictures or draw pictures of foods which can be used.

3. Display a chart showing the classification of foods in three groups of foods.
4. Make a colorful chart illustrating a family at dinner time. Place a label beneath that a healthy family diet should contain foods of the three groups of foods.

Evaluation:

1. Put all the food cards in a large bag and scramble them. Request one of the participants to pick up one food card, identify the food, its nutritional value, and further classify it in one of the three groups of foods.
2. Ask participants to explain a healthy family diet.
3. Give an example of a healthy breakfast and a healthy supper.

Lesson topic: Health of the Pregnant Woman and Her Unborn Child

Time: 2 Hours

Behavioral objectives:

Participants will:

1. Identify the kinds of foods a woman needs to eat when pregnant.
2. Give at least two reasons why a woman needs a proper diet when she is pregnant.
3. Explain what happens to a baby if the woman has not had a proper diet.
4. Give reasons for spacing the births of children.

Generalization:

The health of the pregnant woman and her unborn child is associated with good nutrition and child spacing.

Concepts:

1. The diet of a pregnant woman should include body-building, protective, and energy foods.
2. The diet of a pregnant woman needs additional amounts of body-building foods (protein foods), fruits, and vegetables.
3. Rest, moderate exercise, and periodical medical check-ups also contribute to the mother's health during pregnancy.
4. A mother needs a proper diet when she is pregnant to protect her health. Thus, poor quality diet is linked with miscarriages, stillbirths, and other health problems.

- The food that the pregnant woman eats provides the nutrients needed by the growing baby in her body.
- A good quality diet during pregnancy is needed to produce high quality breast milk to feed the baby at birth.
- Poor quality diet during pregnancy affects the baby, because if he survives, his growth and development are impaired.
- A malnourished mother who has many children spaced too closely is likely to become weak and sick, because frequent pregnancies deplete the body of essential nutrients.
- A mother should space births to allow her body to recover after the last pregnancy, and to allow the mother to breast-feed the child for a longer period.
- Spacing births two to three years apart is the recommended time.

Learning experiences:

1. To get the class interested in the topic, tell the participants, two or three weeks before teaching this class, that they are to be engaged in an experiment dealing with cultivation. The purpose of the experiment is to observe whether there are differences in the growing process of plants, grown under different conditions.
 - Divide the class into groups A and B. Both groups are to plant seeds in separate gardens or containers.

- Request participants of group A to plant seeds in good soil, and provide good care by watering, weeding, and natural light.
 - Request participants to group B to plant the seeds in poor soil, and do not provide any care--no watering, no weeding, no natural light.
 - Encourage participants to observe the growing process in both groups of plants.
 - Lead them to conclude that plants of group A are bigger and healthier than plants in group B, because the former grew in fertile soil and received proper care.
2. During group discussion use the analogy of fertile land and the healthy mother. For this activity use a flip chart illustrating the analogy between the fertile land and the healthy mother.
- Show the first chart.
 - Ask participants to interpret the meaning of the chart, and lead them to infer the analogy.
 - Continue the same procedure with the remaining charts.
 - Lead participants to conclude that good nutrition during pregnancy, proper care of the pregnant mother, and spacing of children result in healthy mothers and babies.
3. For the fertile land and the healthy mother concept, the following texts are to be illustrated on a flip chart.

Picture 1

Good soil produces high-yield crops.

A healthy woman is likely to bear healthy and strong children.

Picture 2

Fertile soil can provide all the nutrients needed to grow food crops. Fertilizers contain those nutrients.

A healthy woman who becomes pregnant can provide all the nutrients needed to keep the baby growing and developing. A variety of foods contain those nutrients.

Picture 3

While the plants are growing, the field needs to be weeded and watered.

While the unborn baby is growing, the mother needs to maintain a healthy diet, and get enough rest and exercise to keep down interfering disease.

Picture 4

One can prevent destruction of crops by getting rid of rodents and insects.

She can prevent pregnancy problems by having regular check-ups at the Health Center.

Picture 5

The outcome should be high-yield crops at the time of harvesting.

The outcome should be a healthy baby and a healthy mother at the time of the birth.

Picture 6

The land needs to lie idle for a while. Rotation of crops is advised.

The woman needs to allow two to three years before becoming pregnant again.

(Source: Adapted from materials for Family Planning in Home Economics, American Home Economics Association, 1973.)

4. Invite a nurse of a nearby health center to give a talk on nutrition of the pregnant woman. Ask her to cover the following points:
 - Types of foods a pregnant woman should eat.
 - How good nutrition protects the health of mother and child.
 - Frequent health problems of pregnant women reported at the health center.
 - Health problems of a child born to a malnourished woman.
 - Reasons for spacing births.

When possible, use visual aids, slides, or films to illustrate the talk. Provide time for a question and answer period.

5. Discuss the planning and preparation of foods.
 - Get participants involved in planning a diet for a pregnant woman.
 - Prepare a meal rich in protein and protective foods. Make sure participants cooperate in food preparation.
 - At the end of the activity, ask participants to assess the nutritive value of the meals and why it is good for a pregnant woman.

Teaching aids:

1. Make a flip chart illustrating the analogy between the fertile land and the healthy woman. Choose pictures that are relevant to the cultural background of participants.
2. Display a chart with the Colombian groups of foods.
3. Illustrate on a bulletin board samples of diets for pregnant women. Illustrate with pictures of local foods.
4. Make a chart illustrating a healthy mother and her newborn child. Good nutrition and child spacing result in a healthy mother and child.

Evaluation:

Once the class is over, display a chart with the groups of foods. Then ask participants to:

1. Identify the foods a mother should eat in major quantities when she is pregnant.
2. Give two reasons why a pregnant woman needs a proper diet.

3. Explain what may happen to the baby's health when the mother does not have a good quality diet, especially protein deficiency, during her pregnancy.
4. Give at least three reasons why spacing births is recommended.

Lesson Topic: Nutritional Needs of Children

Time: 2 Hours

Behavioral objectives:

Participants will:

1. Give at least two reasons why a baby should be breast-fed up to a year or longer.
2. Explain what is a supplementary food.
3. Describe the type of diet needed for a child after a year of age.
4. List some children's health problems associated with malnutrition.
5. Explain why long breast-feeding is related to child spacing.

Generalization:

A child's health status, activity, and capacity to grow and develop are related to the kinds of food he/she eats.

Concepts:

1. Breast milk is the best food for babies up to a year or longer; it contains the elements a baby needs for healthy growth, and provides defenses against disease.
2. After the third month of life, the breast-feeding baby needs supplementary foods that must be introduced gradually.

3. After a year of age, a child needs food from the three groups of foods--body-building, protective, and energy foods.
4. Body-building foods (protein food) are needed to foster physical growth and development.
5. Protective foods (vegetables and fruits) provide resistance to disease and proper body functioning.
6. Energy foods are needed to keep a child active.
7. A baby is likely to become malnourished after weaning, if his/her diet is poor in body-building foods.
8. Malnutrition is the cause of many deaths among infants, and if the child survives, his/her growth and development could be impaired.
9. A malnourished child can easily die of diarrhea, whooping cough, or measles because of lowered body resistance.
10. Protein deficiency during the first years of a child's life is linked to mental retardation, because the development of the brain is affected.
11. A mother can assure proper breast-feeding up to a year or longer by spacing births and eating additional amounts of body-building foods.

Learning activities:

1. To get the group interested in the class topic, collect pictures of malnourished children, and place them on a board.

- Ask participants why many children in their community look weak, thin, and sick like the pictures being shown.
 - What is malnutrition?
 - Did you know that many children die each year because of malnutrition?
 - Point out that a baby who is not properly fed might become malnourished or die during the first years of his life.
2. A class discussion on infant-feeding practices will make participants aware of their own problems regarding child feeding.
3. The following questions may guide the discussion:
- Do you usually breast feed your babies?
 - How long do you usually breast-feed your babies?
 - Was there anyone who had to stop breast-feeding before the child's first year?
 - Did you notice changes in the baby's health?
 - What kind of health problems did you encounter?
 - If you took the child to the health center, what was the opinion of the doctor?
 - Did any of your children die because of malnutrition?
 - Those of you who breast-fed up to a year or longer, how was the baby's health during the first year?
 - What kind of supplementary food did the child receive while you were breast-feeding him?

Point out that a child breast-fed up to a year or longer has more chances to be healthy and grow normally.

4. Give an illustrated lecture about infant and child feeding. The lecture should cover the following topics:
 - Importance and need of breast-feeding
 - Supplementary foods for breast-feeding babies
 - Bottle feeding and the importance of cleanliness to avoid contamination
 - Nutritional needs of the child after the first year
 - Malnutrition and how it affects a child's health and growth
 - Need of spacing births in order to secure longer breast-feeding.

For the illustrated lecture, use films, slides or visual aids.

5. Plan two demonstrations about supplementary foods, using local foods, and how to prepare an infant's formula. Place emphasis on the use of cleanliness in order to avoid food contamination.

Teaching aids:

1. Display a flannelgraph with the three groups of foods used in the previous class.
2. Display posters related to breast feeding. They are available at the ICBF, PAM Program, or Health Centers.
3. Display charts illustrating the child's diet during the first year of life. Charts are available at the ICBF or PAM Programs.

4. Illustrate on a bulletin board the functions of the three groups of foods. Cut out pictures showing children of different ages (body-building foods); healthy-looking children (protective foods); children playing (energy foods).
5. Select one poster showing a mother breast-feeding her baby; use a label stating: "Your baby can benefit from long breast-feeding--if you space births and eat properly."

Evaluation:

Once the class is over, ask participants to:

1. Give two reasons why a baby should be breast-fed.
2. Explain a supplementary food.
3. Describe the type of foods that should be included in a child's diet after a year of age.
4. Give at least three child health problems that are related to malnutrition.
5. Explain why child spacing is a necessary condition if the mother is to breast-feed her child up to a year or longer.

Lesson topic: Family Food Supply and Size of Family

Time: 1 Hour

Behavioral objectives:

Participants will:

1. Explain the relationship between family food needs, family food supply, and family size.
2. Describe how families can obtain additional food supplies when the size of the family increases.
3. Explain the relationship between family size, planning, and satisfaction of family food needs.

Generalization:

As the size of the family grows larger, families need to increase family food supplies in order to satisfy the food needs of all family members.

Concepts:

The size of the family affects the amount of food supply available for each family member.

1. Each new birth in a family implies that the family must produce or purchase additional food, if all family members are to be properly nourished.
2. The health of family members is seriously threatened when families cannot increase food supplies needed to satisfy the nutritional needs of all family members.
3. The amount of food available for each family member is one of the factors that should be considered when planning the size of the family.

Low-income families who plan the size of the family are likely to afford better food, in quality and quantity, for all family members than their counterparts with unplanned families.

Learning activities:

1. To get the group interested in the class topic, bring to class several bananas or common community fruits. Tell the class that since they are learning about nutrition and foods, in today's class they are going to eat some bananas.

Divide the class into two groups--A and B. Group A is to receive one-half of the bananas, and group B is to receive one-fifth of the bananas. After they finish eating, ask the group:

- Did you like the fruit?
- What is its nutritive value?
- What happened in the distribution of food?
- Which group is likely to be more satisfied?

Point out that in a real situation, the distribution of food among family members varies according to the availability of food supplies.

2. Plan a simulation game to demonstrate food distribution in a small and in a large family.
 - Choose several volunteers to play food distribution in two families. Family A has four members (two parents,

and two children), and family B has eight members (two parents, and six children).

- Place two tables in front of the group and display on each table equal amounts of food served for a typical breakfast. Provide cups, bowls, and plates as needed.
- Invite family A to come by the first table and serve breakfast for a family of four.
- Invite family B to come by the next table and serve breakfast for a family of eight.
- Ask participants to compare the food received by each family member in both families. Then discuss the following questions:
 - Is there any difference in the food distribution in the two families?
 - Which family is likely to be better fed and satisfied?
 - How would members of the small family benefit by having larger portions of food?
 - How would members of the large family be affected by having spare portions of food?

Summarize the main points brought up in the discussion. Point out that poor families are likely to become malnourished when they keep having children and cannot afford additional food supplies.

3. As a problem-solving activity, read the following case to the class:

The Sanchez family is a rural family composed of two young parents, and two children aged four and two. They produce most of the food they eat and sell the remaining food to a nearby cooperative. Mrs. Sanchez is expecting a third baby, and she fears that having another child will limit the food left for selling; and that if she keeps having babies, there will not be any food left for selling--and probably the children will go hungry.

Another problem is that they need cash from food selling to afford minimal life necessities.

- Ask the participants to think about the main problem facing this family (prospects of food shortage).
- Once participants have identified the problem, direct them to find solutions.
- Lead them to consider, among the solutions, the need for a family to plan not to have more children, because they cannot feed the family properly with the few available resources and still have cash for minimal life necessities.

Teaching aids:

1. Design two charts representing family size and family food supply. Chart 1 illustrates a balance holding a family of four in one plate, and some food supplies in the other

plate. Both plates stand at the same level (balanced). Chart 2 represents an inclined balance. In the lowest plate stands a family of eight, and in the highest plate stands the same amount of food as in chart 1. Write at the bottom of chart 1: "Family food supply is adequate for the size of the family." Write at the bottom of chart 2: "Family food supply is inadequate for the size of the family."

2. Illustrate on a bulletin board food distribution in a large family and in a small family.

Evaluation:

Ask participants to:

1. Explain how family size is related to family food supply and the satisfaction of family food needs.
2. Describe how families can obtain additional food supplies when the size of the family increases.
3. Explain how family planning is related to the satisfaction of family food needs.

Lesson topic: Improving the Quality of the Family Diet

Time: 2 Hours

Behavioral objectives:

Participants will:

1. Give examples of ways to improve the quality of the family diet.
2. Explain in which way planning the size of the family may contribute to enhancing the quality of the family diet.
3. Practice at least one way of improving the quality of the family diet.

Generalization:

The quality of the family diet might be improved by the proper selection of, storage of, and preparation of foods, as well as by increasing family food supplies as needed to meet the nutritional needs of all family members.

Concepts:

1. The quality of the family diet can be improved by properly:
 - Selecting foods of the three groups of foods.
 - Storing foods to avoid spoilage, contamination, or loss of nutritive values.
 - Cooking, using methods to avoid loss of nutritive value.

- Increasing family food supplies as needed to meet the nutritional needs of the family members.
2. The increase of family food supplies can be attained by:
- Increasing family income to purchase needed food supplies.
 - Growing foods in gardens.
 - Raising chickens, rabbits for protein food supply.
 - Planning the size of the family to attain a balance between family size and family food supply.

Learning activities:

1. Based on what participants have learned in the nutrition course, ask them to think of ways to improve the family diet. Listen to all the suggestions and write them down on a blackboard.
2. Write down on a blackboard several traditional practices regarding food selection, storage, and preparation that affect the quality of the family diet which needs to be improved. Make sure to include practices that are relevant to the needs and problems of participants. Some examples of negative practices are as follows:
 - Family diet is rich in starchy food (plantain, potato).
 - Family diet lacks vegetables and fruits.
 - Vegetables are cooked in too much water, then water is discarded.

- Vegetables are used to feed animals.
- Meat is heavily washed in running water.
- Abundant crops (fruits, vegetables, and perishable foods) are quickly rotten and discarded.
- Foods are left in contact with insects and rodents.

Discuss with participants the practices written on the blackboard. Discuss how they would improve the negative practices. Then lead the discussion toward ways of improving family resources in order to increase food supplies.

Write on the blackboard the ideas suggested by participants and discuss other ways you might consider relevant.

Some ideas to be discussed are as follows:

- Grow vegetables and fruits in the garden.
- Grow chickens, rabbits, and pigs.
- Increase family income to purchase food.
- Increase production of certain foods at community level by using modern methods of land cultivation.
- Plan the size of the family so the family food supply is adequate for the number of people in the family.

The last ideas regarding family planning must be discussed as this is one of the objectives of the class.

3. Choose one or more of the following demonstrations dealing with improvement of the family diet. Perhaps, some of these demonstrations have been done in previous lessons. Make sure to point out the relevance of such practices in enhancing the family diet.

- Plan a family diet including three groups of foods.
 - Cook vegetables or other foods properly.
 - Store foods properly.
 - Conserve meat and other foods.
 - Grow foods in a garden.
4. Organize a tasting buffet for the participants.
- Prepare several new foods, and have a tasting buffet to encourage their eating new foods.
 - Try new recipes of foods that people usually fix in the traditional ways.
 - Encourage participants to express how they liked the new foods.
5. Encourage participants to engage in at least one project tending to enhance the quality of the family diet.
- Hold personal meetings with participants and discuss their ideas.
 - Make sure to provide guidelines and assistance while the projects are being carried out.
 - Encourage participants to discuss the outcomes of their projects.

Teaching aids:

A great many materials (pamphlets, posters, booklets) dealing with nutrition have been published in Colombia.

1. Gather the ones relevant to the class objective, and display them in the classroom; or furnish participants with

personal copies if available. Make sure it includes those materials showing how to cook foods properly, how to store foods, how to conserve foods, and how to start a garden.

2. Using a bulletin board, illustrate with pictures one or more ways of improving the family diet, e.g., how to select foods in the market, how to plan a meal, how to store foods, how to cook vegetables.
3. Use teaching aids from the previous class dealing with family size and family food supply.

Evaluation:

Ask participants to:

1. Give two examples of ways you could improve the quality of the family diet.
2. Explain how family planning can help families to enhance the quality of the family diet.
3. Tell us about the home project in which you were engaged. What were the results?

AREA: Housing

UNIT: Family housing needs and relationship to family size

GROUP: Lower class, urban and rural Colombian women

Objectives for the unit:

1. Recognize minimal housing requirements needed to enhance family's health and well-being.
2. Understand the relationship between family housing needs, housing resources, and family size.
3. Understand that family planning is a necessary condition for low-income families to maintain a balance between housing resources and family size.
4. Understand the effect of overpopulation on the quality of community housing.
5. Become familiar with ways of improving housing conditions.

Lesson topics:

This unit includes the following lessons:

1. Family housing needs.
2. Family size and relationship to housing resources.
3. Effect of overpopulation on the quality of community housing.

Lesson topic: Family Housing Needs

Time: 1 Hour

Behavioral objectives:

Participants will:

1. Describe minimal housing requirements needed to provide for the health and well-being of the family.
2. Identify poor housing conditions that may affect the health and well-being of the family.

Generalization:

Good quality housing enhances the health and well-being of all family members, by meeting their needs for protection, security, comfort, and privacy.

Concepts:

1. Good quality housing enhances individuals' physical health by providing:
 - Protection against the elements: rain, cold, heat, and wind.
 - Good sanitary conditions such as toilet facilities, running water, garbage disposal, freedom from insects and rodents.
 - Good ventilation and daylight.
 - Clean and uncrowded sleeping facilities.
 - Kitchen separate from other house sections.
 - Space outside the house for animals such as dogs, pigs, and chickens.

2. Good quality housing also enhances the family well-being by providing:
 - Privacy for parents and children.
 - Comfortable housing arrangements.
 - Study and work facilities.
 - Free space for children's place.
 - Separate sleeping facilities for parents, boys, and girls.

Learning activities:

1. To get the group interested in the class topic, display a photograph of a housing area in the community. Ask participants to observe the picture; then discuss:
 - What ideas can you express about the houses of the photograph?
 - What does good quality housing mean to you?
2. Point out that good quality housing should meet certain requirements in order to protect the health and well-being of the family.
3. Use a flip chart to illustrate the minimal requirements of housing. Select pictures suited to the economic and social conditions of participants.
 - Show the first chart.
 - Ask the participants to identify the house featured, and how it is related to the health and well-being of the family.

- Follow the same procedure with the rest of the charts.
Point out correct ideas and clarify misconceptions.
 - Make a summary of the minimal requirements of housing.
4. During group discussions:
- Cut out pictures illustrating good and poor housing features and frame them.
 - Display one of them on a bulletin board or flannel-graph.
 - Request participants to identify in the picture the good and the bad housing features; ask them to explain how these housing features affect the health and well-being of the family.
 - Continue the same procedure with the rest of the picture.

Teaching aids:

1. Design a flip-chart illustrating housing requirements for learning experience 3.
2. Display photographs or pictures illustrating aspects of good quality housing. Write below each picture the outstanding characteristic of the house. Remember that pictures must be suited to the socioeconomic level of participants.
3. Design a poster illustrating a small family engaged in different activities. (Example: Family in a living room; the mother knits; the father listens to the radio;

the children play with balls.) Write below the picture this message: "Good quality housing enhances the health and well-being of the family."

4. Display or distribute home economics extension materials dealing with housing.

Evaluation:

1. Describe at least three housing requirements needed to:
(a) protect the health of the family; and (b) enhance the well-being of the family.
2. Furnish each participant with one or two pictures illustrating good and poor quality housing. Ask each one to observe the features and identify which are the good features and the bad features, and how they affect the health and well-being of the family.

Lesson topic: Family Size and Relationship to Housing Resources

Time: 1 Hour

Behavioral objectives:

Participants will:

1. Describe how the health and well-being of the family may be affected when housing resources are not suitable to the size of the family.
2. Explain why planning the size of the family is related to better housing conditions for all family members.

Generalization:

The state of health and general well-being of the family are impaired when housing resources are not suited to the number of people in the family.

Concepts:

1. The birth of additional children in the family affects the distribution of housing resources.
2. As the size of the family increases, housing facilities should be expanded in order to maintain the health, protection, privacy, and comfort of all family members.
3. Family's health is threatened when families live in overcrowded conditions because of poor ventilation and exposure to unhealthy sanitary conditions.
4. Family's comfort and privacy are threatened when many people are confined in a small place; there is no

room for children's play or adults' activities. Sleeping arrangements do not provide privacy for parents or children of either sex.

5. Parents should have only the number of children they can have, based on their available housing resources.
6. Low-income families who plan the size of the family are more likely to provide better housing facilities to all family members than their counterparts who do not plan the size of the family.

Learning activities:

1. To get the group interested in the class topic, illustrate the sleeping arrangements of two families who both live in small houses with only two bedrooms. Picture One shows the sleeping arrangements of a small family (parents and two children); Picture Two shows the sleeping arrangements of a large family (parents and six children). Request participants to observe both pictures and lead them to see relationships between size of family and space.
 - What do these pictures represent?
 - Why are there differences in the distribution of space?
 - What benefits does the small family derive from having adequate sleeping arrangements?
 - How do sleeping arrangements of the large family affect the health and well-being of all family members?

2. Design an interview aimed at getting participants to understand the relationship between family housing needs, family resources, and family size.
 - Choose two volunteers who are willing to share their own experiences of living in a housing project. Volunteer A has a small family, and Volunteer B has a large family.
 - Write several questions to be asked of each volunteer. You might interview both participants at the same time, so participants can compare and contrast the answers.
3. Narrate or illustrate with pictures the following case story.

Teresa and Miguel got married recently and have no place to live. They are staying at Miguel's parents who own a small house in a rural area. The house is already crowded as two of Miguel's brothers are living in the same house with their wives and children. Teresa and Miguel are confined in a small room with their belongings.

- How would you describe the living conditions of all family members in terms of housing?
- How would the living arrangements for Teresa and Miguel change with the birth of their first child?
- What would happen if Teresa and Miguel kept having children?

- What should Teresa and Miguel consider before having a child?
- In which way do you think family planning would help Teresa and Miguel to enhance the family's quality of living.

Teaching aids:

1. Illustrate with pictures the relationship between family size and housing resources. Display two contrasting pictures; one shows a large family living in over-crowded conditions, and the other illustrates a small family living in healthy and comfortable conditions. Write below the pictures: "Family size affects the distribution of housing resources."
2. Design a poster illustrating a couple with one child looking at a house in the background. Write below the picture these statements: "Thinking of having a new baby? Think first about the housing resources you have to have in order to receive a new baby."

Evaluation:

1. Could you describe how the health and well-being of a family may be affected when housing resources are not suited to the size of the family?
2. Could you explain why families who plan the size of their families are likely to provide better housing facilities to all family members?

Lesson topic: Effect of Overpopulation on the Quality of
Community Housing

Time: 2 Hours

Behavioral objectives:

Participants will:

1. Explain why the excess of population can affect the quality of community housing.
2. Give examples of ways of improving housing conditions in the community.
3. Practice at least one way of improving their housing conditions.

Generalization:

Excess of population in a low-income community is likely to be associated with housing shortage and decreasing quality of housing.

Concepts:

1. Population increase in a given community demands an increment of housing units as well.
2. Failure to increase the number of houses needed for a growing population affects the quality of living of community members.
3. Housing shortage results from the excess of population over the existing housing units of the community.
4. Housing shortage generates overcrowded living conditions which, in turn, cause major health problems.

5. Housing shortage is associated with housing deterioration, a condition resulting from overcrowded living conditions and lack of resources to improve poor housing conditions.

Learning activities:

1. Invite a social worker, community leader, or an officer of the Institute of Popular Housing to talk about housing programs in the community. Encourage her/him to use slides, photographs or films. She/he may talk about the following aspects.
 - Rapid population increase and how it affects community housing.
 - How poor quality housing affects the well-being of community members.
 - Recent trends in housing construction. Why the small house prevails over the large house.
 - Importance of family planning for contributing to reduction of population growth, thus enhancing the community quality of life.
2. Encourage participants to discuss different ways a family can improve poor housing conditions.
 - Ask participants to mention problems related to housing that they may improve.
 - Write a list of problems on the blackboard.
 - Discuss one by one the housing-related problems and how they can be improved.

- Plan one or two demonstrations on home improvement.

(Example: How to fix a floor.)

3. Encourage participants to engage in home projects aimed at improving poor housing conditions; provide the guidelines and necessary assistance.
 - Make a window where it is most needed.
 - Fix the floor, the walls, the roof.
 - Paint walls, roofs.
 - Repair or make a toilet, a shower.
 - Divide with lining a room shared by boys and girls.
 - Repair holes in the roof.
 - Make shelves or cabinets.

Teaching aids:

1. Using bulletin boards, illustrate different ways of improving housing conditions, such as the different steps to fix a floor.
2. Display on a bulletin board a set of photographs of community housing. Write below this message: "Our community--we can help to make it better."

Evaluation:

1. Explain why the quality of community housing is affected when too many people come to live here.
2. Mention three practices you could engage in to improve housing conditions.

3. Arrange for home visits to check progress, and encourage participants to report in class about the finished home project.

AREA: Clothing

UNIT: Children's clothing needs and relationship to family size

GROUP: Lower class, urban and rural Colombian women

Objectives for the unit:

1. Understand the importance of clothing in enhancing children's health status, as well as the satisfaction of their social and psychological needs.
2. Understand the relationship between children's clothing needs, family resources for the provision of clothing, and family size.
3. Become familiar with ways of improving the quality of children's clothing.
4. Realize that low-income families need to plan the size of the family, as one of the ways to maintain or improve the quality of children's clothing.

Lesson topics:

This unit includes the following lessons.

1. Children's functional clothing.
2. Children's clothing needs, family resources, and family size.

Lesson topic: Children's Functional Clothing

Time: 1½ Hours

Behavioral objective:

Participants will describe the characteristics of functional clothing for children.

Generalization:

Functional clothing fulfills the child's need for physical protection and security, comfort, and attractiveness.

Concepts:

1. Children need clothing to protect their bodies from the elements: cold, heat, rain, and wind.
2. Proper clothing enhances the child's health by offering protection from dirt and extreme conditions of cold and hot weather.
3. Children's clothing should be designed to take into account their physical security; avoid hooks, laces, and other things that may become health hazards.
4. Children's clothing should be comfortable, allowing the child to play, rest, and exercise.
5. Children's clothing should be simple in design; avoid unnecessary zippers, buttons, and fancy trimmings that may interfere with the child's ability to dress himself.
6. Children's clothing should be made of washable and durable materials.

7. Children's clothing should give them a sense of emotional security. Children feel good about themselves when they wear appropriate clothes.

Learning activities:

1. Start the class by narrating the case about the school-age girl from a nearby community who did not want to go to school any more. The cause? Well . . . she was very upset because her peers made fun of her every time she went to school poorly dressed; her few ragged outfits did not fit her any more.

- What kind of feeling was the girl showing?
- Do you sympathize with the girl?
- How would you feel having your children in the same position as the girl in the story?

Point out that clothing has an important role in fostering a child's feeling of security and adequacy, because if the child is dressed according to the community standards, he will feel more accepted by his peer group. The opposite occurs when the child is poorly dressed, because his peers perceive him as being different from the others and reject him. Consequently, the child feels unworthy, unwanted, and is likely to develop feelings of insecurity and low self-esteem.

2. Arrange a fashion show with children's clothes made by participants in the clothing course.

- Find volunteers who want their children to participate in the show.
- As every child stands in front of the class, point out those characteristics that make clothes look functional.
- When the show has concluded, make a summary of the functions of clothing.

If a fashion show is not possible, design a colorful flip-chart illustrating the functions of clothing, and lead participants to identify those functions.

3. Ask participants to identify functional and non-functional children's clothes from fashion catalogs and arrange them on a bulletin board.
 - Furnish each group with scissors, tape, fashion catalog, and a piece of cardboard.
 - Ask them to identify and cut out pictures of functional and non-functional children's clothes from a fashion catalog; paste pictures separately on a piece of cardboard or bulletin board.
 - Supervise each group while it is engaged in the activity; make sure to clear up misconceptions.
 - Encourage each group to show its visual aid to the rest of the group and explain why clothing pictures do or do not meet functional requirements.

Teaching Aids:

1. Display children's clothes made by participants in the clothing course and place labels pointing out their functional requirements.
2. Cut out pictures of clothes from fashion books that underline specific functions, e.g., protection from elements, physical security, comfort and attractiveness. Arrange pictures on a bulletin board, and place labels under the main function.
3. Illustrate with pictures the child's clothing needs according to the climate and stage of development.
4. Illustrate with pictures or real items baby clothing needs. Describe proper care of baby's clothes.
5. Distribute, or display pamphlets dealing with consumer education focused on clothing.

Evaluation:

1. Once the class is over, ask participants to describe which characteristics you should look for when selecting functional clothing for your children.

Lesson topic: Children's Clothing Needs, Family Resources, and Family Size

Time: 1 Hour

Behavioral objectives:

Participants will:

1. Explain the relationship between a child's clothing needs, family resources needed to provide for child's clothing needs, and family size.
2. Give examples of ways a low-income family can improve the quality of children's clothing.
3. Practice at least one way of improving the quality of children's clothing.
4. Explain how planning the size of the family is related to better clothing for children.

Generalization:

Family resources available for individual clothing needs are affected by the number of children in the family.

Concepts:

1. The larger the size of the family, the more resources are needed to meet the clothing needs of children.
2. Low-income families spend most of their income on food, and little is left to cover their clothing needs.
3. For low-income families, the provision of clothing is highly affected by the birth of additional children.

4. Poor families often lack sewing skills and sewing facilities; consequently, the contributions these resources could provide toward children's clothing needs are not possible.
5. Low-income families who plan the size of the family are more likely to provide for the child's clothing needs than are their counterparts who do not practice family planning.

Learning activities:

Continue by:

1. Narrating the case of the little girl who did not want to go to school any more, after having one of the participants recall the story.

Well . . . the little girl we were talking about came from a very poor family; she was the sixth among eight children and her parents could barely meet the food needs of the family. As a result, there was no money left for other basic necessities like clothes, medicines, and school supplies. Children's clothes were donated by the church every year, but they were insufficient to meet the clothing needs of the family.

- What was the real problem in this family?
- How could this family have prevented the problem? Point out that as the family grows, it will need more resources to provide for all needs (clothing included), and that if poor families plan the size of the family, they are likely to provide more adequately for all family needs.

2. Plan a simulation game to show the relationship between children's clothing needs, family resources available to provide for clothing needs of children, and family size.
 - Gather a great variety of children's clothing and arrange a clothing store.
 - Affix a price to each of the items.
 - Choose two volunteers to play the roles of Mrs. Garcia and Mrs. Rios, and a third one to play the role of the clerk (Mrs. Lopez).
 - Tell the class that Easter is coming and that by tradition, almost everybody in the village loves to wear a new dress to go to church (the teacher may choose another traditional holiday in the village). Mrs. Garcia and Mrs. Rios are going shopping, and each one has an equal amount of money for the purpose. Mrs. Garcia has three children (two boys and one girl), and Mrs. Rios has seven children (four boys and three girls).
 - Give to each one an amount of 2,000 Colombian pesos (about 50 dollars, U.S.). Next, ask Mrs. Garcia to come into the store to buy clothes for all her children. When she is through, ask Mrs. Rios to come in and do her shopping.
 - Once the role playing is over, invite the volunteers to join the group and discuss the experience. Ask the following questions:
 - Could Mrs. Garcia buy clothes for her three children?

Could Mrs. Rios buy clothes for her eight children?

Whose children will be more satisfied and why?

What would Mrs. Rios have to do to provide clothes
for all her children?

What would have happened to Mrs. Garcia's children
if she had had a larger family?

What would have happened to Mrs. Rios' children if she
had had the chance to plan the family? Why?

3. Lead participants to discuss their own problems regarding provision of clothing for their children, and how family planning is necessary if families are to provide for all their basic life necessities, clothing included.
 - What are the major needs of your children in terms of clothing? (Discuss according to climate, stage of development, and socio-psychological demands.)
 - Do your children make clothing demands that your family cannot afford?
 - What is the reason that you cannot afford your children's clothing demands?
 - Do you think that if families had planned the size of their family they would be in a better economic situation to provide for their clothing needs and other necessities?
 - Why is family planning related to better provision of clothing for your children?
 - In addition to family planning, can you think of other ways low-income families can improve a child's wardrobe?

- At the end of the discussion, make a list on the black-board of ways a family can improve children's clothing. Be sure to underline the importance of family planning.
4. Encourage participants to engage in individual home projects that would improve the quality of their children's clothing. Projects may include:
 - Making clothes of second-hand clothes.
 - Mending children's clothes.
 - Altering clothes that may cause health hazards.
 - Altering clothes to make them more functional and attractive.
 5. Have individual meetings to discuss particular needs and problems of participants, in relation to clothing for children.
 6. Provide guidelines and assistance for successful projects.
 7. Encourage participants to report to class the results of their projects.

Teaching aids:

1. Make a chart illustrating how family size affects the distribution of resources needed for the provision of clothing for children.
2. Illustrate with pictures ways of improving the children's wardrobes, e.g., altering clothes, making clothes of second-hand clothes.
3. Design a poster illustrating a family with two or three children who are properly dressed. Write below the

picture this message: "Family planning can help families to provide for children's clothing needs."

Evaluation:

Once the class is over, ask participants to:

1. Explain how the size of the family affects the distribution of resources available for the provision of children's clothing needs.
2. Mention the main problems you are facing to provide for the children's clothing needs.
3. Give examples of ways you could try to improve a child's wardrobe.
4. Explain how planning the size of the family is related to better clothing for children.

AREA: Child Development and Family Relationships

UNIT: Child and Family Needs and Relationship to Family Planning

GROUP: Lower-class, urban and rural Colombian women

Objectives for the unit:

1. Understand child's developmental needs and the parents' role in guiding a child's growth and development.
2. Understand that the child's healthy growth and development is likely to occur when he is reared in a planned and spaced family.
3. Understand that family planning and the spacing of children enhance the quality of life of the family and the community.

Lesson topics:

This unit involves the following lessons:

1. Developmental needs of children.
2. Family planning and relationship to child development.
3. Family planning and quality of life of the family.
4. Family planning and quality of life of the community.

Lesson topic: Developmental Needs of Children.

Time: 2 Hours.

Behavioral Objectives:

Participants will:

1. Mention at least three developmental needs of children.
2. Give examples of child-care practices that can foster the child's growth and development.
3. Describe at least one positive child-care practice that has been experienced by participants in their homes.

Generalization:

Besides meeting his physical needs, a child's healthy growth and development can be fostered in a stimulating environment where he can develop mental capacities and learning of social skills under the loving care and approval of his family.

Concepts:

1. A child's physical growth is enhanced by providing him with the right food for his age, plenty of rest and exercise, and optimal healthy conditions.
2. Besides meeting his physical needs, a child needs much loving care, attention, and stimulation.
3. A child needs loving care so he can learn that he is loved and wanted by his family.
4. A child reared with love and approval learns to love and develop feelings of security and self-confidence.

5. A child needs to develop his mental capacities so he can understand and make sense of the world in which he lives.
6. A child's mental capacities develop in a stimulating environment where he is allowed to learn to adapt to his world. Let him play freely, move about, explore, and experiment.
7. A child's first learning takes place through his senses. Let him touch, smell, hear, see, and put things into his mouth. Provide him with safe toys and materials.
8. Learning to talk fosters the child's mental skills. Talk to a child clearly and in simple sentences, read to him, and encourage him to talk.
9. As a child learns new behaviors, praise him for his accomplishments and encourage him to learn.
10. A child needs to interact with other people to learn social skills. Let the child play with other children and adults so he can learn the value of sharing, rights and rules, and acceptance of others.

Learning activities:

1. To get the group interested in the class topic, arrange three or four pictures of children at different stages of development and showing different behaviors such as a baby playing with his fingers, crawling, walking, playing with other children, or being cared for by his parents.
 - Ask participants to observe these pictures and tell what these pictures represent.

- Lead them to conclude that parents need to be aware of the child's needs and guide him toward a healthy growth and development.
2. If available, show a film or slides about the child's growth and development. If not available, design a set of pictures (or cut down pictures) illustrating aspects of child's growth and development (physical, mental, social, and emotional aspects) from infancy through the school years.
- Mount pictures on cardboard and use on a flannelgraph.
 - Arrange pictures by age or stage of development.
 - Show the first picture; explain to participants what aspect of development is shown in the picture; ask how parents can foster that particular aspect of growth and development.
 - Continue the same procedure with the rest of the pictures.
 - Make a summary of the main points.
3. Encourage participants to talk about their personal experiences in rearing their children. As the discussion progresses, emphasize the positive practices mentioned by participants and introduce new ones that are relevant in child development. The following questions can guide the discussion:
- What are the physical needs of children?
 - Besides physical needs, what are other needs of children?

- With regard to a baby, how does he behave while he is awake?
 - How do you react when your baby plays with objects, puts them into his mouth, or throws things away?
 - How do you respond to the baby's demands for love and attention?
 - How does your child behave when he starts walking?
 - How do you react when your child starts moving about and playing?
 - Do you play with your child? What kind of toys does he prefer?
 - How do you encourage your child to talk?
 - How can you make your child feel that he is loved and wanted?
 - What does the child learn when he interacts with other children and adults?
 - What other experiences does your child need to expand his world?
 - How is a child reared with love and approval likely to turn out?
4. Finish the discussion by making a summary of the lesson. For this purpose, you may put on a flannelboard the pictures of children, illustrating children's needs, care, and guidance. Encourage participants to use with their own children positive child-rearing practices discussed in the classroom.

- Discuss with participants different experiences in which they can engage at home to improve their childrearing practices.
- Write down a list of positive child-care practices, or use the flannelboard pictures of children, illustrating the child's needs, care, and guidance.
- Discuss with each participant the experiences she wants to try, and encourage her to get the participation of the father and other family members as well.
- Encourage participants to describe their experiences in the next class meeting.

The following list consists of ideas for child-care home projects:

- Sing a lullaby while you cuddle your baby or bathe him.
- Arrange a room with different toys and materials.
- Father and mother play a game with the child.
- Tell a short story and ask him to repeat it.
- Reward the child with hugs and words for any accomplishment.
- Make him feel important by talking to him and listening to him.
- Take him on a field trip or visit friends. Explain to him what you see in the environment and make him notice things.
- Talk to him and answer his questions as you work.

5. Plan a toy-making workshop. Ask participants to collect all kinds of waste materials that can be used in children's play, e.g., old pots and pans, empty boxes, plastic containers, pieces of fabrics.
 - Explore the potential of the materials gathered, in terms of their contribution to the child's healthy growth.
 - Give a demonstration on how to make a toy, e.g., doll, puppet, filled bags, musical instruments.
 - Discuss with participants different ideas regarding toy making.
 - Encourage participants to engage in individual toy-making projects suitable to the age and maturity of their children.

Teaching aids:

1. Cut out pictures, or draw pictures, of children, illustrating child's developmental needs, care and guidance. Prepare the pictures to be used on flannelboard (Learning Experiences 1, 2, and 3).
2. Using a board, illustrate with pictures milestones in children's progress through the first five years of life.
3. If available, illustrate with films or slides the discussion dealing with childrearing practices (Learning Experience 2).
4. Distribute pamphlets or booklets dealing with child care. These might be available for Extension Leaders.

5. Arrange a display of toys. These may include the toys made by participants in the workshop, or simple materials that help children to learn and play.

Evaluation:

1. Mention at least three developmental needs of children.
2. Give examples of child-care practices that can foster the following aspects of child's growth and development:
 - Growing up physically healthy
 - Learning of concepts, e.g., sweet-sour; cold-warm, big-small
 - Learning to talk
 - Learning to share and respect the rights of others
 - Developing feelings of security and self-confidence.
3. Describe the child-caring practice that you experimented with at home as a child-care home project.

Lesson topic: Family Planning and Its Relationship to Child Development

Time: 1 Hour

Behavioral objectives:

Participants will:

1. Explain why a child's growth and development might be affected when children are born in large and unplanned families.
2. Explain how planning the size of the family and the spacing of children are related to the healthy growth and development of children.

Generalization:

Parents who carefully plan the size of the family are likely to provide more adequately for the physical, mental, and socio-emotional needs of their children.

Concepts:

Family planning means that parents think in advance how many children they should have, and when to have the babies.

- Parents' decision to have a determined number of children is based on the availability of family resources to support the children, as well as parents' willingness to provide them loving care, attention, and stimulation.
- Children may resent their parents and feel that the satisfaction of their physical needs is threatened when they realize that family resources are insufficient to provide for the birth of additional children.

- A child may feel unloved and unwanted when parents do not pay much attention to his physical and emotional needs, because of many children in the family.
- Children born in a planned family are likely to feel loved and wanted, since parents who plan the size of the family are usually concerned with the well-being of the children.
- Parents should plan the size of the family so each new child is received with love and happiness.

Learning activities:

1. To get the group interested in the class topic:
 - Cut out pictures of neglected or abandoned children from local newspapers or magazines. Cut out pictures of happy children with their parents.
 - Arrange these pictures on a bulletin board in a contrasting manner.
 - Ask participants to express their opinions and feelings about the pictures.
2. Work out a case study dealing with problems related to child development and guidance faced by children of poor and unplanned families. A case story is written for this lesson as an example, but you should write a case suited to the needs, problems, and cultural background of participants.
 - Read the story to the audience and illustrate the story with pictures.

- Discuss with participants:
 - Problems facing the children of the story
 - Causes of the problem
 - How children may feel about their parents
 - How the parents in the story could have prevented the problems.
 - Emphasize the need for family planning and child spacing as a necessary condition for responsible parenthood.
3. Small group discussion:
- Divide participants into groups of four to six persons.
 - Ask each group to discuss:
 - Meaning of responsible parenthood.
 - How children born in planned families are likely to grow up and feel about themselves and their parents.
 - Point a leader to guide the discussion in each group, and further inform the main ideas discussed when the class reconvenes.
 - Emphasize the main ideas discussed in the classroom.

Teaching aids:

1. Display posters related to family planning and responsible parenthood. These are available at Family Planning Centers.
2. Distribute pamphlets or booklets related to family planning among participants. These are available at Family Planning Centers.

3. Design a poster illustrating a happy-looking couple playing with two spaced children. Above the picture, write down the following message: "Children feel loved and wanted when they have parents who do care for them." Below the picture, write this message: "Have only the number of children you want and can take care of."

Evaluation:

At the end of the lesson, ask participants to:

1. Explain why the growth and development of a child might be affected when he is born in a large and unplanned family.
2. Explain why children born in a planned family, and spaced properly, have better chances of reaching a healthy growth and development.

Example of case story:

Luis Garcia, his wife Teresa, and their eight children, ages one through ten, live in a run-down, two-room house in the shanty town near the capital city.

Luis works as a janitor in a factory, and Teresa works full-time as a maid for a rich family. Their salaries are not enough to buy food and to pay the rent, and nothing is ever left for other necessities like school supplies for the children, clothes, and medicines.

None of the school-age children are going to school; their parents force them to drop out of school, because the two oldest

girls have to take care of the youngest, while the mother is working; and ten-year-old Jose, the oldest of the children, has to earn some money by selling newspapers in the streets.

The lives of these children are miserable; they resent their parents because they do not have much to eat, and are poorly dressed; they do not go to school as other children do, and are obliged to beg money or food in the streets.

When the parents come home at night, the children are beaten and scolded as this is the usual way these parents cope with life's frustrations.

Furthermore, the children are growing up hating their parents because they don't receive loving care and attention and feel bad about themselves.

Lesson topic: Family Planning and Quality of Life of the Family

Time: 2 Hours.

Behavioral objectives:

Participants will:

1. Describe the benefits of family planning and the spacing of children for all family members and the family unit.
2. Explain the relationship between family planning and quality of life of the family.

Generalization:

Family planning and the spacing of children are associated with the betterment of the quality of life of the individual and the family unit.

Concepts:

- A child born in a planned and spaced family is likely to receive adequate care and attention, good education, and a promising future.
- A mother who plans the size of her family and spaces births is likely to preserve her health, is eager to give loving care to wanted children, has extra time and energy to devote to other things, faces the future with security and confidence, grows self-confident when she realizes she can control life events.
- A father who has a planned family is likely to be able to provide for all family necessities, faces the future with security, has the satisfaction of having only wanted children.

- Family planning brings advantages to the family unit. The family is better fed and healthier. Family tensions decrease when all its members do not have to worry about financial stress. Education of children becomes a family goal rather than surviving. Family members develop self-respect and pride in themselves.
- Family-planning benefits for all family members enhance the quality of life of the family.

Learning activities:

1. To get the group interested in the class topics:
 - Illustrate the meaning of quality of life on a bulletin board. Place in the center of a bulletin board the picture of a small family; surrounding the family picture, place pictures of family-life necessities and family-life goals that are relevant to the needs and motivations of participants.
 - Invite participants to react to the picture: What does this picture represent? Can families attain what they want to get in life? How can families attain what they most want in life?
2. Prior to the class meeting, work out two five-to-ten-minute dramas. One play shows the family-life problems facing an unplanned family, and the second play shows the quality of living of a planned family. (Examples of plays are presented at the end of the lesson, but you must work

out dramas concerned with the needs, problems, interests, and motivations of participants.)

- Arrange backgrounds appropriate to the play to be shown.
- Choose the needed volunteers to play the roles. Make sure they know the lines at the time of the show.

Rehearse as convenient.

- Dramatize the case of the unplanned family. Once the play has concluded, discuss with participants the family-life problems facing this particular family. Then, write on one side of the blackboard the problems faced by children, parents, and the family as a whole.
- Dramatize the case of the planned family. At the end, discuss with participants the advantages of family planning for parents, children, and the family as a whole. Then, write on the other side of the blackboard the advantages of family planning for children, parents, and the family unit.
- Encourage participants to compare and contrast the family-life situations of planned and unplanned families.

Note: A puppet show can be presented instead of role playing. For a puppet show, design the characters needed for the show.

3. Invite to class a doctor or nurse of a nearby Family Planning or Health Center. Ask the resource person to

talk about the importance of family planning, and how parents can plan and space births. Allow time for questions and answers. You might plan other class meetings for family-planning conferences, according to the interests of participants. Encourage the attendance of husbands.

4. Small groups of participants are to interpret the meaning of quality of life of a family.
 - Divide the class in small groups of four to six.
 - Furnish each group with pictures, magazines, newspapers, scissors, tape, pencils. Also provide a bulletin board or a piece of cardboard.
 - Ask participants to illustrate with pictures the meaning of quality of life of the family.
 - Once the activity is over, ask each group to interpret what they mean for quality of life.

If there are few participants in class, this activity could become an individual activity, because the meaning of quality of life can vary from one person to another.

Teaching aids:

1. Display a bulletin board illustrating the meaning of quality of life (Learning Experience 1).
2. Invite officers of a nearby Family Planning Center to arrange a display concerning Family Planning. It may include posters, pamphlets, contraceptive devices, and others.

Evaluation:

Once the class is finished, ask participants to:

1. Describe how family planning benefits
(a) children, (b) mother, (c) father, and (d) family unit.
2. Explain why family planning is related to the quality of life of the family.

Drama: Family-Life Problems of an Unplanned Family

This is the story of Juan, his wife Isabel, and their seven children, ages one through ten. They live in a small house in the rural area. The father works for the landlord and earns the minimum wage salary. Isabel is buying groceries in a nearby store where she meets Maria, her old friend.

Isabel: Maria, it is so nice to see you. How is your family?

Maria: We are pretty good. Oh, so surprised to see you.

You never go out and attend the community meetings.

Last time we had such a good time.

Isabel: Ah, you know that a married woman with seven kids has no time for fun. I work hard every day, cooking, washing clothes, growing the garden, minding the children; and at the end of the day, I feel sick and tired. You see? I have no time for fun and relaxation.

Maria: I am sorry. Can you get some help from your mother or unmarried sisters?

Isabel: No. They have to work hard, too, and besides, they recently moved away.

Maria: Well, there must be a way. Look at yourself. You look tired and pale. You should get some rest and find somebody to take care of your children.

Isabel: The idea sounds good, but it does not work for me. I will get some help from my oldest daughter who will be ten years old next month. It is about time she takes some responsibilities and helps me in the kitchen and watches the other children.

Maria: You mean you are depriving your oldest daughter of going to school?

Isabel: . . . any my oldest son, too. He is only eight, and he is already helping his father in the fields.

Maria: That is terrible, Isabel. Your children need to be educated so they can turn out to be successful men and women. Besides, they are still children, and they would like to play with other children instead of working all day.

Isabel: Not my children. They have to realize that we are poor, and that poor children cannot play and enjoy life like other children do. They got to work and forget about going to school. If we were born poor, our children will be poor, too. That is God's law.

Maria: You are wrong, Isabel. You and your husband can help yourselves if you want to get out of poverty. You can control your lives if you want.

Isabel: How can we help ourselves? My husband works very hard and he can hardly provide for food. Sometimes the children don't have much to eat, and they complain. The other day my oldest boy was crying, because he needed a new pair of shoes, but we could not afford to buy his shoes. They have to accept that we are poor. On the other hand, my husband is getting older and weak, and he is in such a bad mood every day that he cannot tolerate any advice.

Maria: Don't you think that if you had fewer children, life would be different for every one in your family?

Isabel: I guess so.

Maria: You better talk about this with your husband, because you are still young and if you don't stop now, you may have more babies that you cannot support.

Isabel: Well. . . I will think about it.

Drama: Quality of Life of a Planned Family

This is the story of Pedro, his wife Teresa, and his two children, ages seven and ten. They live on a small farm that Pedro inherited from his father. Teresa is at the school helping a group of ladies to fix a room for the celebration of parents' day. While she is wrapping some gifts, she engaged in a conversation with Gloria.

Teresa: I love wrapping gifts, but I love more when I receive them.

Gloria: I agree with you, but the economic situation is so hard that nothing is ever left to afford such luxuries.

Teresa: Right, but no matter how hard the situation is, we always make it somehow.

Gloria: You know, Teresa, I admire you. You are always cheerful and optimistic. What do you do to yourself?

Teresa: Well, there is no secret. All it takes is a little bit of self-confidence and willingness to do things the way you want to.

Gloria: But sometimes we are helpless; things go bad, and we have no control over them.

Teresa: Let's put it this way. Why is it that every time the teacher asks us to come, the same mothers show up, and the other mothers don't even know who the teacher is?

Gloria: I guess we are lucky to have spare time; my mother lives with me, and she can take care of the house and the children while I go out, and you? . . . well, you have only two children.

Teresa: Right . . . two children. But things just don't happen incidentally. Before Pedro and I got married, we planned the kind of life we wanted for the family, and almost everything has worked out for us.

Gloria: What do you mean?

Teresa: Listen. When I was a child and saw my mother working hard trying to rear seven kids, I said to myself : When I get married, I am going to live a meaningful life; I will have only the number of kids that my husband and I can support and take good care of, save money for education and for the future. Then, when Pedro and I decided to get married, I talked to him about these things, and he thought I was crazy, but eventually, I convinced him to make plans for the future. We agreed to have only two kids two years after we got married, and space them three years apart. So, we planned ahead how many children to have, and when to have them.

Gloria: It is unbelievable. I have heard about family planning, but thought that nobody would practice such a thing.

Teresa: Why not? We have to be responsible for how our kids turn out, and you know that besides food and clothing they need to be educated, healthy, and the most important is the loving care and attention from both parents.

Gloria: It sounds as if you have reared two happy kids.

Teresa: And I have a happy husband, too. Last year my husband got sick and I ran the farm the same way he did. I thought that if I had had seven kids like my mother did, I wouldn't be able to help him.

Gloria: He must be proud of you.

Teresa: I suppose so.

Gloria: I am quite interested. What do you do . . . I
mean . . . to prevent pregnancies.

Teresa: Just go to the Family Planning Center. The doctor
will tell you what is the best method for you, and
then you don't have to worry about having children
that you cannot support.

Gloria: Thank you, Teresa. I will ask my husband to go
along with me.

Lesson topic: Family Planning and Quality of Life of the Community

Time: 1½ Hours

Behavioral objectives:

Participants will:

1. Identify three community social problems that are caused by irresponsible parenthood.
2. Explain how community social problems affect the quality of life of the community.
3. Explain how family planning is related to the quality of life of the community.

Generalization:

Families who practice family planning can help to enhance the quality of life of the community, as major social problems derived from irresponsible parenthood are likely to decline.

Concepts:

1. Poor families who do not plan the size of the family may cause many socioeconomic problems in the community where they live.
2. Some socioeconomic problems that are related to irresponsible parenthood are:
 - Child desertion and abandonment that foster future criminals and social misfits.
 - Child labor due to parents' lack of resources to support the family, and consequently, deprivation of the child's education, and living the normal life of a child.

- High rate of unemployment due to to overpopulation and scarcity of jobs. Unemployment fosters poverty and problems derived from poverty.
- High rate of migration due to unemployment or poor living conditions. Migration is related to broken homes when separate members of the family migrate and never return to the family.
- Family planning may enhance the quality of life of the community as poverty, disease, and lack of security are likely to decline when parents practice family planning and have only wanted children.

Learning experiences:

Get the group interested in the class topic by:

1. Using a bulletin board, arranging a variety of pictures of the community in which you work. Place a label below the pictures stating: "Can we help to improve the living conditions of our community?" Ask the participants to react to the statement. If available, you can:
 - Use slides or a film of the community.
 - Plan a field trip to the main places of the community. Ask participants to observe the conditions, the people, and discuss it afterward.
2. Discussion as a group, by asking:
 - Participants to think about a problem that affects the quality of life of the community.

- Each one to mention the problem and write the problems on the blackboard.
 - Participants to underline those problems that are linked with lack of family planning (irresponsible parent-hood).
 - Participants to discuss why these problems are related to lack of family planning, and how they affect the quality of living of the community. Problems may vary from urban to rural areas, but there are some problems that are common to both, such as child abandonment, child labor, high rates of migration due to unemployment, and other.
3. Invite a community leader or social worker to give a talk about community social problems caused by irresponsible parenthood. Ask him/her to point out how family planning would help to reduce some of these problems, and contribute to enhancing the quality of life of the community. If possible, illustrate the talk with films or slides.

Teaching aids:

1. Design a poster or several posters illustrating major community social problems affecting the quality of life of the community, and underline the role of family planning in helping to reduce the problem. Example: Draw or cut out pictures of children abandoned in the streets, and above the picture place this message: "We can prevent

this from happening to our children." Place below the picture this message: "Family planning can help us to have wanted children we can support."

2. Use pictures, slides, films to illustrate discussions or talks.
3. Design a poster illustrating a family with the background of a community. Write below the picture this message: "Happy families make happy communities."

Evaluation:

Once the lesson is over, ask participants to:

1. Identify the community social problems that they think are caused by parents' lack of responsibility in having more children than they can support.
2. Explain how the problems they have just mentioned can affect the quality of life of the community.
3. Explain how families can help to improve living conditions of the community by practicing family planning.

APPENDIX B
EVALUATION INSTRUMENT

Evaluation InstrumentFamily-Planning Teaching Model

Unit _____

Lesson Plan _____

Mark with an x your present status:

_____ American home economics student

_____ Colombian home economics student

_____ Colombian home economist

Following are several items concerning the different parts of the lesson plan. Please read each statement and indicate whether you strongly agree (SA); agree (A); undecided (U); disagree (D); or strongly disagree (SD); by encircling the appropriate number along the horizontal lines of each circle.

1. <u>General Objectives (for the unit)</u>	SA	A	U	D	SD
Objectives are clearly stated	1	2	3	4	5
Objectives can be achieved	1	2	3	4	5
2. <u>Behavioral Objectives</u>					
Objectives are clearly stated	1	2	3	4	5
Objectives clearly determine the lesson content	1	2	3	4	5
Objectives clearly determine the learning experience	1	2	3	4	5
Objectives clearly determine the evaluation procedures	1	2	3	4	5
Objectives can be achieved	1	2	3	4	5

	SA	A	U	D	SD
3. <u>Generalization</u>					
Information is accurate	1	2	3	4	5
Information is relevant	1	2	3	4	5
Information is a lesson summary	1	2	3	4	5
Comments: _____					

4. <u>Concepts</u>					
Information is clear	1	2	3	4	5
Information is accurate	1	2	3	4	5
Information is supported by the generalization	1	2	3	4	5
Information is relevant to the lesson plan	1	2	3	4	5
5. <u>Learning Experiences</u>					
Experiences are appropriate for reaching the class objective	1	2	3	4	5
Experiences are familiar to participants	1	2	3	4	5
Experiences provide for participants' involvement in the learning process	1	2	3	4	5
Experiences are relevant to participants' needs and problems	1	2	3	4	5
Experiences are suited to the participants' interests	1	2	3	4	5
Experiences are suited to the participants' educational level	1	2	3	4	5

	SA	A	U	D	SD
6. <u>Teaching Aids</u>					
Teaching aids are appropriate for reaching the objective	1	2	3	4	5
Teaching aids are relevant to the class content	1	2	3	4	5
Teaching aids stimulate learning	1	2	3	4	5
Teaching aids are suited to the participants' interests	1	2	3	4	5
Teaching aids are suited to the participants' educational level	1	2	3	4	5
7. <u>Evaluation</u>					
Evaluation statements are clear	1	2	3	4	5
Evaluation is appropriate to the participants' educational level	1	2	3	4	5
Comments: _____					

Once you have completed the evaluation of all the lesson plans, proceed to complete the second section of the evaluation.

Second Section

Read each one of the following statements and indicate whether you strongly agree (SA); agree (A); undecided (U); disagree (D); or strongly disagree (SD); by encircling the appropriate number along the horizontal line of each statement.

	SA	A	U	D	SD
<u>Statements</u>					
The general content of Family-Planning Education can be integrated in the Home Economics programs of the Institution.	1	2	3	4	5
Family-Planning Education content is relevant to the needs and problems of Colombian low-income groups.	1	2	3	4	5
Teaching methods are practical and challenging.	1	2	3	4	5
Teaching aids are practical and challenging.	1	2	3	4	5
The language is suitable to the participants' educational level as well as their socio-cultural context.	1	2	3	4	5

Comments: _____

