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Population Education through the Curriculum

Pat U. Boquiren

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POPULATION EDUCATION
THROUGH THE CURRICULUM

by

Pat U. Boquiren

A Project Report
Submitted to the
Faculty of The Graduate College
in partial fulfillment
of the
Specialist in Education Degree

Western Michigan University
Kalamazoo, Michigan
August 1973
ACKNOWLEDGEMENTS

This Project Report, which is the culmination of my study program, was made possible through a study leave with pay granted by the Department of Education of the Philippines and the assistance and counsel of the members of my graduate committee—Dr. Kenneth F. Simon, Dr. Robert Brashear, and Dr. Betty Taylor.

Dr. William P. Viall, my chairman, guided me throughout the completion of my study program.

Pat U. Boquiren
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CHAPTER I

WHY POPULATION EDUCATION

The World's Concern on Population

The rapid increase of population is considered one of today's most serious problems. This problem should concern everyone everywhere all over the world because the consequences of the rapid increase of population upon the well-being of the human race are enormous. The effects are not only physical, as are now being experienced in many of the poor countries, but also a host of undesirable conditions which impinge upon human life, happiness, economics, religion, government, and peace. In the political scene, mounting population difficulties are increasingly intermingled with political tensions and instabilities both nationally and internationally.

Population researchers, specialists, sociologists, and demographers predict that if the world population will not be controlled, overpopulation may become the cause of chaos, instability, and unrest for all countries of the world. The under-developed countries are feeling great impact, where presently the available food supply is barely keeping pace with the increasing population.

The Rev. Theodore Hesburg, President of the University of Notre Dame, said that the rapid population growth
is a greater problem in the developing countries because it eats up all their gains in attempting to provide food, health services and housing.

Abdul Salam, chief scientific adviser of Pakistan and a distinguished scientist, said that he is positive that twenty years from now, the less developed world will be as hungry, as relatively underdeveloped and as desperately as poor today despite the fact that the world has enough resources—technical, scientific, and material—to eliminate poverty and disease.

The United Nations has projected in 1963 that the world population is estimated at 5.4 billion in the year 2000 although the projections now (1973) estimate the population of the world to be from 6.1 billion to 7 billion by the year 2000.¹

The population problem is indeed serious not only from the standpoint of assuring adequate supply of food but also because of its deeper effects on health and nutrition, productive employment, literacy and education, living standards, peace and moral life.

This problem and its many ramifications are complex, and people will be grappling with it for many years to

come. If people will not deal with this problem effectively and in a timely fashion, the peace of the world will be threatened.

Huxley said that "Man is the sole agent for the evolutionary process on earth. He is responsible for the future of this planet."¹ In answer to the question—What does man want out of life in this planet?—he asserted that "... it is to conserve and develop the resources of the earth and the resources of our own nature. The aim, then, should be to increase the richness of life and enhance its quality."² "Fulfillment" is perhaps the embracing word—more fulfillment and less frustration for more human beings through greater realization of possibilities, varied and fuller achievements in human societies; more beauty and less ugliness and more knowledge as against ignorance and apathy.

Since the increase of the earth’s population, man has been overexploiting the earth’s natural resources. Soils have been misused. Air and water are now polluted. Enormous quantities of resources have been wasted instead of conserved. In the under-developed countries much land has been cultivated, more forests denuded, and soil erosion is seen everywhere.

²Ibid., p. 303.
The Philippines is now experiencing the difficulty of the lack of water due to the cutting down of vast forests for immediate short-range use. Other countries are also suffering from a similar problem.

It is timely that the consequences of increasing population on the quality of life are topics that students study in our schools today. The situation of the world in the years 2000 is dependent upon how the youth now face far-reaching decisions about population.

The movement towards a population education program in the school curriculum would be contributing to motivational population awareness, knowledge of demography, and better understanding of the total problem. One of the recommendations of the United States Commission on Population Growth and the American Future stated, "In order to better prepare present and future generations to meet the challenges arising from population change, the federal government should enact a Population Education Act to assist school systems in establishing well-planned population education programs."¹

This recommendation may be used as guide for developing countries in preparing their programs in Population Education.

The United Nations' Concern

Population questions are now an important and serious issues in world affairs, as seen by the approval of the U.N. General Assembly of a resolution on Population Growth and Economic Development. This resolution has spurred the different governments of the world--members of the world organization--to develop their own national policies on how to deal with the problems brought about by population in accordance with their own culture and needs.

The United Nations' charter provides a Population Commission subordinate to the Economic Council. Thus, a unit of the U.N. Secretariat was established to undertake studies on population. This illustrates the importance of population in the economic and social affairs of nations. In 1954 the U.N. sponsored a world population conference in Rome in cooperation with the International Union for the Scientific Study of Population. While no resolutions on questions of policy were considered, that conference was devoted to an exchange of ideas and experiences among the international participants.

In 1963 the U.N. sponsored an Asian Population Conference. Another similar conference was sponsored in 1965. Major issues on population policies were brought to the attention of the participating member countries. In the 17th Session of the U.N. General Assembly, a proposal of a resolution on Population Growth and Economic Development
was included in the agenda which necessitated the formulation of an official position on the issues on population and economic development by the governments of the various member-nations.

The introductory text of the U.N. official position on population and economic development included statements that economic and social progress is dependent upon education; that a fair standard of living and productive work are closely interrelated with population growth and economic development. The official position also stated that the health and welfare of the family required special attention especially in areas with a relatively high rate of population growth. The official position placed responsibility on each government to decide its own policies and devise its program of action for dealing with the problems of population and socio-economic progress; and recognition of the need for increased knowledge about the causes and consequences of demographic trends.

The World Population Year News Service\(^1\) reported that 72 nations have requested assistance from the U.N. in solving demographic and population problems during the last six years from 1967. This report also showed that at the end of 1971, the U.N. has supported more than 400 population projects in 40 countries of Africa, Asia,

Latin America and the Middle East in their demographic and population problems. In 1972 another 12 nations received the same assistance from the United Nations.

The U.N. Fund for Population Activities under the direction of Rafael Salas have assisted 72 countries in their population programs.

The Unesco Executive Board in November 1967 endorsed the perspective program in the field of population as part of the coordinated U.N. program. The board perspectives covered:

1. a long-term program of studies, including some cross-national analysis, concerning the reciprocal relations between the development of education and evolution of population;

2. the promotion of demography as an academic discipline;

3. the training of demographers at university level and the creation of opportunities for post-graduate demographic research;

4. the dissemination in schools of knowledge about population data and problems; and

5. the introduction of population material into adult education programs.1

Later, in 1968, within the overall activities of the U.N. the general conference of Unesco approved a coordinated program in the fields of Unesco's competence as follows:

1. Within Education: by helping the development of teaching materials, curricula, teacher training,

adult education, women's education, community education, etc.; by studying the possibilities of including an educational pilot project on family planning in the experimental literacy program.

2. Within Social Sciences: by carrying out studies on the different aspects of population and family planning, so as to establish the intellectual base for understanding the complexity of family planning in the context of various cultures.

3. Within Communication: by studying ways for the development and operation of efficient programs within the fields of population and family planning; and by providing relevant information and documentation.1

Asia's Concern

The present population in Asia is estimated to be 2,108 million.2 Asia alone has the most of the world's population and has the highest population growth. Since the countries of Asia have these factors of population—the most number and the highest growth rate—the core of the population problem should be in this part of the world.

There are some countries in Asia which have established national policies on population such as Japan, Korea, Singapore, Taiwan, Thailand, Malaysia, and lately, the Philippines. Some of these countries have succeeded in lowering their growth rate of population. Asia also has

1 Unesco Asian Regional Workshop, ibid., p. 6.

many of the countries which are either developing or underdeveloped and today the governments of these countries have become actively concerned with their population problems. The most discouraging aspect of life in these countries in Asia is the seeming immutability of the problems of food and hunger. There is a high rate of starvation and malnutrition. This problem goes along with the persistence of traditional societies and the high rate of human reproduction. The values which Asians place on large families and strong kinship and unity are too well known. Generally, the problems of population in Asia are largely on the economic aspects of life—the slow cultural change, the low level of education, the slow economic growth, and the high rate of population increase.

As one of the activities carried out in the implementation of the Unesco resolution, a regional workshop in Population and Family Education was sponsored by the Unesco Regional Office for Education in Asia in Bangkok in 1970. The objectives of this workshop were to study how elements of population and family education can be incorporated in the curriculum of secondary and possibly upper elementary levels of education; to prepare a few sample curriculum units in terms of analysis of content objectives; and to develop appropriate curriculum materials. The effect of this workshop has been felt in the Philippines and perhaps in the other countries which sent participants in this workshop.
The Philippines' Concern

The Philippines has a population of 39.4 million and a birth rate of 3.4 per cent, which is one of the highest in the world today.\(^1\) The average mother survival through her child-bearing age period is 15 to 44 years and produces an average of 6.8 children. With this trend, the population of the Philippines is predicted by demographers to double by the year 2000. For a small country (approximate 300,000 square kilometers in area), this projected population will come grave socio-economic problems—housing, education, health, employment and other essential services—which the country cannot contain comfortably and adequately, if nothing is done about it.

The leaders of the country, recognizing the seriousness of this problem, have established a national policy in population. President Marcos, in his State of the Nation message to Congress in 1970 stated, "With the soaring birth rate, the prospects of continued economic development are considerably diminished. Indeed, there is a strong possibility that the gains which we have carefully built up over the years may be cancelled by a continuing population explosion. After a careful weighing of factors, I have

\(^1\)1971 World Population Data Sheet, Population Reference Bureau, Inc.
decided to propose legislation making family planning an official policy of my Administration.¹

In 1971, Republic Act No. 6365² created the Commission on Population which was given the responsibility of: (1) formulating and implementing a long-term population program which includes population education (under scoring by the writer), (2) promoting and publishing studies in all aspects of population, and (3) assembling and disseminating technical and scientific information related to medical, social, economic and cultural phenomena as these affect, or are affected by, a growing population. In 1972, President Marcos issued a decree³ making the population program an integral and vital part of social reform and economic development thereby giving the population policy more strength and meaning.

Within the context of this national policy, the Department of Education embarked upon a five-year program on Population Education which placed a target of 12 million or more students by 1977 through planned curriculum development, teacher-training courses and family life education. In July 1972, the Secretary of Education issued a

¹"State of the Nation", Message of the President of the Philippines to Congress, January 1970.


Memorandum for higher education to offer courses in Population Education. This Memorandum has its basis in another decree specifically for Education issued by the President of the Philippines providing for the offering of courses in taxation, population (underscored by this writer), cooperatives, land reform and six units of any foreign language in lieu of the present requirement of 12 units in Spanish.
CHAPTER II

POPULATION EDUCATION AND ITS ASPECTS

Population Education Defined

The term "population education" has not, up to the present time, been clearly defined as it is a relatively new concept and terminology in education. The concept of population education is open to a variety of interpretations. Hence, the many definitions advanced by various authorities and groups.

A temporary, working definition suggested by the Population Bulletin is that "Population education seeks to bring about the realization of the individual, family, social and environmental effects of the explosive increase in human population, the rapid shifts in the concentration and distribution of people, the implications of changing age and other demographic patterns, and the conceivable options that may be open to mankind to cope with the consequent problems. While it is confined exclusively to a particular age group, it is focused primarily on students who will become the principal childbearers within one or two decades."¹

Rao\textsuperscript{1} believed that population education is aimed at providing population awareness in broad perspective as building a social order of equality and economic justice leading to a welfare state, the process of internalization of attitudes emphasizing the belief that man controls and determines the course of action for himself, his family and his country.

Vieder\textsuperscript{2}man, on the other hand, views population education as the moral and ethical process of population education which is to develop awareness and understanding of the consequences of individual decisions in the important area of reproductive behavior. A population awareness program should provide the facts of population dynamics of family life and of human reproduction. It should also show how the action of each individual member of the society affects others. He defined the concept as the "process by which the student investigates and explores the nature and meaning of population process, population characteristics, causes of population changes for himself, his family, his society, and the world."

The Unesco Regional Workshop on Population and Family Education for Asia defined population education as "an


educational programme which provides for a study of the population situation in the family, community, nation, and world with the purpose of developing in the students rational and responsible attitudes and behavior toward that situation.  

Another definition advanced by Russo\(^2\) is that population education is the process of explaining and testing alternatives on population matters. Since matters related to population are of vital concern to everyone, they should be incorporated systematically into the formal school curriculum. The educational program should aim at children, adolescents and young adults and should foster an understanding of the causes and consequences of human population, characteristics, and change.

Still another definition of population education is considered as a process of inquiry into the nature of human population and the natural and human consequences of demographic change. Massialas\(^3\) said that the main purpose of population education is to help the individual to make rational decisions about population matters as a member of

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\(^1\)Unesco Asian Regional Workshop, *op. cit.*, p. 13.


his family, local community as well as national and world communities, utilizing appropriate information sources and inquiry skills.

Being a new concept or terminology in education, population education has not as yet been precisely defined. All the definitions deal with one common factor which suggests the many facetted aspects of population. In recent years the concept has broadened to include educational programs in the formal and non-formal setting. The programs planned were directed mostly to population control through Family Planning. Meanwhile, educators and teachers are working for an operational definition of Population Education as a general frame of reference.

From the various definitions, a conflicting view may suggest that the concept of population education may center on sex education. It should be emphasized, at this stage, that population education is not sex education nor is it education on the various techniques of birth control, although the topics of birth control or sex education are related to population education. There is considerable confusion concerning the relationship between population education and sex education. One aspect of the misunderstanding lies in the fact that the definitions and descriptions of each vary considerably from country to country, and even within countries. Often the term "sex education" itself tends to arouse considerable opposition even before
its contents are understood.

Although there may be some degree of relationship between population education and sex education, this Project excludes the latter from the topic under discussion. The goals and objectives will provide a clarification as to what population education is and should be.

**Goals and Objectives of Population Education**

In a status report "Population Education: School and Non-School" by Viederman,1 it was indicated that, somehow, some of the goals and objectives of this concept of population education are within the definition of the term itself. He stated that population education is a process where the individuals learn:

1. the causes and, more important, the consequences of population phenomena for themselves, their community, and their environment.

2. the possible effective means by which society as a whole, and they as individuals, can respond to and influence these phenomena in order to enhance the quality of life now and in the future.

In other words, Viederman stressed that the emphasis is in the learning rather than in the teaching. The individual is more concerned with the consequences of the population phenomena as they affect his own life, his family,

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and his community. The causes and consequences of population expansion enhance the need to learn about it because it focuses attention on matters which the individual can do as an individual and as a member of society to change population attitude and behavior for his own benefit and for his society.

The Unesco Asian Regional Workshop concluded that the general objectives of population education may be summarized as being to assist the pupil to acquire the relevant levels of cognitive operation in:

1. basic demographic concepts, processes and methodologies;
2. static and dynamic description of the population situation at the micro- and macro-levels;
3. the determinants of population growth;
4. the consequences of population growth;
5. the human reproductive process as a basis for understanding human fertility;
6. the national and international population policies and programmes; and
7. to develop rational and responsible attitudes and behaviour towards family size and national population programmes.¹

Wayland² has suggested four general goals of population education:

¹Unesco Asian Regional Workshop, op. cit., p. 34.
1. Student as a population actor in society. Over one's lifetime, individuals engage in a set of decisions which have population consequences—decisions such as to have or not to have children, spacing children's arrival, number of children to have, and other actions. Such decisions will give shape to the society for a long period of time.

2. Student as a population actor in his own family. Population related actions will have a serious influence on the individual's future.

3. The individual's life chances as a function of population-related behavior of others. The individual is both a population actor and a recipient of the actions of others. It is important for the student to understand the ways in which his own future is influenced by the population-related behavior of others. For example, students finishing college in the next ten years will be those who are born at the high level of births of the post World War II period. This cohort will face a special set of problems as it moves through its life cycle.

4. Student as citizen. Public policies with reference to population-related matters are certain to be foci of public debate and decisions in the years ahead. . . the education task is of particular importance in aiding students to participate in these public decisions from an informed base.

Wayland also believed that the foregoing goals are especially suited for American education but are, nevertheless, applicable for other countries.

For Philippine schools, the specific goal can be a quality of life for all people whose basic human needs are satisfied and individual self-realizations are fulfilled. The Population Education Project office at the
Philippine Department of Education suggests that the general goals of Population Education in the country, as deduced from the various definitions and from the needs, state of development and resources of the country should be:

1. **Information.** This will create an awareness of population problems by reporting or imparting facts on the population situation.

2. **Motivation.** This will develop attitudes favorable to a better understanding of the role of the individual in relation to problems in population.

3. **Decision.** This will influence decision making in favor of the individual's realization of his role and his contribution to the solution of the current population situation.

4. **Action.** This will influence the taking of a course of action or definite direction towards the solution of the population problem as a result of the decision or choice made.

Another source advanced the view that virtually all of today's population education reformers, ecologists, conservationists, family planners, and population experts share the conviction that world-wide population goals are as follows:

1. People should be influenced and educated through the content of school programs to see the need for having few babies.

2. Effective education is that which induces couples to have not more than two children as a solution to halt rapid population growth.

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As early as 1962, Hauser\textsuperscript{1} recognized the dangers of a single-minded focus on population control as the goal of population education. While conceding that to ignore such control would be to overlook the implications for personal behavior and public policy, he pointed out that "The problem, of course, is how to treat this, as well as other controversial issues, without indoctrinating the student with the particular view of the given teacher."

For deeper insight into the population issue, other goals have come up to include demography in the curriculum which would provide the student with a framework for understanding himself in the context of successively larger aggregations and associations of mankind. Secondly, the development of awareness and an understanding of the relations between population growth and national development both in the short and long run and also to develop an understanding of the consequences of individual decisions in the important area of reproductive behavior. Thirdly, all levels of the educational system stand in need of materials and curricula on the causes and consequences of population change so that the people can confront population issues intelligently.

\textsuperscript{1}Philip M. Hauser, "Population-Gap in the Curriculum," Teacher's College Record, Vol. 63, No. 6, March 1962.
In addition to the four general goals of population education presented earlier by Wayland, the same author suggests certain specific goals of population study for the secondary schools:

1. Development of an understanding of the significance of population characteristics as a basic factor in a number of special problems, both domestic and foreign.

2. Preparation for decisions as to size of family to be made by students when they establish their own families.

3. Preparation for consideration of and action toward public policy issues directly related to population concerns.

The goals of population are varied and this Project believes that the determination of the goals and objectives of population education are dependent upon the level of economic development, needs, and available resources of countries.

Aspects and Contents of Population Education

Population education content covers a very broad range of subject matter which is beyond just demography. It is possible that the aspects and contents of Population Education in different countries are dependent upon the individual country's needs, goals, and objectives.

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However, there are certain commonalities which any country
has to consider as the aspects and content of this sub-
ject that should be integrated in the school curriculum.

will definitely affect the ecosystem. Natural resources
will be depleted and there will be deterioration of the en-
vironment. Serious problems of water, land, and outdoor
recreation will occur. A motivational film based on Gar-
ret Harding's "The Tragedy of the Commons", points to the
dangers of continued population growth and conveys the
message that man will be better off living in harmony with
nature, and that the view of man as an urban technological
controller of his environment is to be rejected.

Henderson¹ proposed that environmental population
education should be directed not merely to specific, imme-
diate issues such as population or pollution control but
addressed itself as well to helping people develop new
values, a new set of priorities for the world which empha-
sizes not material growth but the concept of one world in
harmony with nature and technology.

The earth has only certain amounts of resources. Once
depleted, they cannot be replaced. With continued popula-
tion growth, the resources of the earth will be out of
balance. The sea as a source of food is fast becoming

¹Martha T. Henderson, "Environmental Education,"
Population: Environment and People, ed. by Noel Hinrich,
polluted with deadly chemicals and fish is no longer safe for human consumption. Japan, for instance, has now a scare on fish and people do not want to eat fish because of the effects of deadly chemicals.¹

The air we breathe is not as clean as it was before. Environmental ecologists propose that there should be education along this area to keep nature in balance and this could be achieved through the control of population growth. Environmental ecology, therefore, should be one of the aspects of Population Education in the schools.

2. **Economics.** In a research conducted by the Commission on Population Growth and the American Future on the implications of a growing population from an economic point of view, a reduction in the rate of population growth would bring important benefits.

Coale² said that a reduction of fertility would make the process of modernization more rapid and more certain. It would accelerate the growth in income, provide more rapidly the possibility of productive employment for the adults who need jobs, make the attainment of universal education easier and would have the obvious and immediate effect of providing the women of low-income countries some

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relief from constant pregnancy, parturition and infant care.

This aspect of Population Education will make the students understand the relationship of age and occupational structure to manpower resources and development, and the per-capita income as indicators of economic progress.

3. **Social.** This aspect of Population Education deals with the question: What are the effects on the social behavior of men on population growth and of population density? A clear illustration on the effects of overcrowding is the experiment by Calhoun\(^1\) on rat population. The reactions of rats in their crowded pen can well be the same with people. Social problems arise from overcrowding and threatens the welfare of people. Social pressures, tensions, competitions which are often destructive are enormous and because of these problems, most youngsters are not able to cope with the situation. Hence, the drug problems, slum housings, immorality and other problems arise.

4. **Agriculture.** In the study of population, the content or aspect of agriculture would focus on the need to step up production to feed the mass of people. It is told that there is only enough land which can be cultivated to grow food for a number of people. In many parts of the

world agricultural lands which were once sufficient to support a stable and much smaller population have already been subdivided beyond limits of effective cultivation. The cost of fertilizing the land is expensive and too often small farmers resort to organic fertilization. The use of mechanized farming in order to grow enough food is costly and developing nations will not have these facilities.

The "Green Revolution" may not be the full answer. Measures of controlling the population must be coordinated with agriculture so that in the scale the birth rate will have to be lower than food production. Then freedom from hunger and want may be achieved.

5. Nutrition. With the food problem where families have inadequate food supply, high percentage of malnutrition occurs especially among the age group 1 to 7 years old. With too many people to feed the proper quality and quantity of food needed for optimum growth and development will be a serious problem. It is a well known fact that nutrition plays an important role in the mental and intellectual development of individuals. If a nation could not produce the needed food for its population, the country could be producing citizens with low mental capacity and physically weak babies who will ultimately bring up a weak nation.

India had this fear of bringing up mentally retarded citizens because of its hunger problems. To avoid this
disaster the food production program was intensified alongside with family planning program.

6. Technology and Industry. This is the problem of more developed countries where the nation is highly industrialized and its technology progressive. These nations are now raising alarms about the impact of modern technology on the environment. There is evidence of this alarm—dying rivers and lakes and air pollution in big, industrial cities such as Los Angeles, New York, Chicago, Tokyo, London and others. Even contaminated food like the tuna fish affected by mercuric oxide flowing into the sea from one of Japan's factories has caused alarm among the people.

The effects of industrialization and technology in developing nations are not very apparent as yet because their attention is focused on the more important food problem and raising the standards of living. The study of this aspect of Population Education will also be directed toward the concept that science and technology can be the answer to many of man's problems, but could also produce disaster for mankind if not applied with careful attention to their effects on the ecosystem necessary for man's survival.

7. Urbanization. As population increases the tendency is for people to move to urban areas with the hope that life for them would be more comfortable and that jobs would be available. As a result of this movement from the
rural to the urban areas the cities have become congested and the problems of housing, crime, disease, social dislocations and others occur often. Facilities and services in the urban areas become imbalanced because of this influx thus causing breakdown and failure.

8. **Family Planning and Population Control.** These aspects of Population Education focus their attention to educating students to learn how to limit population size. The emphasis is placed on family planning programs and their services since the goal is the regulation of human numbers in families. Family planning programs generally offer a variety of birth control methods and counseling services for marriage, parenthood, nutrition education, child spacing and assistance for sub-fertile and sterile couples. The factors influencing family sizes are numerous with the knowledge and information available and the students will make their future decisions on matters of age for marriage, family size, spacing children's birth, and education.

These factors will greatly help in the stabilization of the nation’s population growth as the objective of family planning is ideally planning for the whole development of family members for the quality of life which is attainable if the family size is small.

9. **Beyond Family Planning.** Family planning is not the answer for population control. Something else must be
done and it is the conscious regulation of population size by society. Beyond Family Planning suggests that there are measures which should be considered by nations in answer to the control of population growth. Paul and Anne Ehrlich suggest some measures which students can discuss and investigate for the feasibility for national implementation:

a. the use of socio-economic measures;

b. compulsory fertility control;

c. maximum freedom of choice concerning number and spacing of children;

d. use of abortion and voluntary sterilization to supplement other forms of birth control;

e. changing human attitudes concerning reproductive behavior.

Berelson also has listed possible proposals:

a. Extension of voluntary fertility control;

b. Establishment of involuntary fertility control and mass use of fertility control;

c. Intensified educational campaign;

d. Incentive programs which refers to payments or their equivalent made directly to couples who make use of birth control methods;

e. Tax and welfare benefits and penalties—a system of social service that would discourage child bearing rather than encourage it;

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f. Shifts in social and economic institutions;
g. Political channels and organizations; and,
h. Augmented research efforts.

The foregoing discussion on the aspects and contents of Population Education would include information and knowledge on the following:

1. Population situation as to size, growth, migration, distribution and trends;

2. Relationship of population to quality of life as food, health, education, employment, urbanization, environment, ecology, socio-economic development, agriculture, industry, and family life.

3. Human reproduction as human physiology, human sexuality, family planning, contraception, and fertility control; and,

4. Biochemical and medical information on aspects of population control as those of the clinical and operational methods.

The aspects and contents of Population Education presented in this chapter are not prescriptive. Doubtless, there may be others which may be added to this list as the situation and need arise. These aspects should develop awareness and understanding of the consequences and implications of over population to the quality of life and the earth's resources.
CHAPTER III

ROLE OF SCHOOLS IN POPULATION EDUCATION

Since the study of population depends upon education, the schools are thought to be the logical and instrumental institutions in the dissemination of this concept. This responsibility becomes significant when youths are to make rational decisions about their future. It becomes the added role of the schools to provide the necessary experiences and knowledge about the aspects and implications of population, including population change.

Curriculum Aspects

The present curriculum offerings in the public schools are considered "too crowded" and the inclusion of a new subject may meet certain opposition from educational bureaucracies. There are problems that would be met in the inclusion of this subject, such as: the lack of curriculum materials that have been developed to make Population Education a new discipline and the reality that there are not enough trained teachers to adequately handle the new subject.

Nevertheless, as initially experienced by the Philippines, and perhaps by other countries, the contents and
aspects of Population Education can be integrated with the existing school curricula by utilizing certain strategies or a combination of strategies suggested by the type of organization.

The Report of the Asian Regional Workshop on Population and Family Education suggested a number of different ways of adding population studies to the existing curriculum. Some of these ways require considerable modifications of the present program in the schools. The other ways may only require a combination of strategies to organize the program.

Organization

Some of the types of organization suggested by the Asian Regional Workshop on Population and Family Education are:

1. **Single courses in Population Education.** One possibility is to develop a term/semester, or a year course, concerned solely with population. The basic advantage to be gained by this approach would be the depth of awareness to which it would be possible to bring the pupils or students. Also, far fewer teachers would need to be trained. One disadvantage is that the course would be a major (and possibly unwelcome) addition to already over-burdened time tables. Also, if the course were presented at a relatively high level within the system, the many pupils who have left school before reaching this level would be receiving nothing. If the

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course were presented at a low-level, there would be certain concepts which could not be adequately covered. Finally, it would be difficult to find or train teachers in sufficient depth to teach such a course adequately, especially when one considers the multi-disciplinary nature of population study.

2. **Unit in a subject area.** A second alternative is that of the unit approach. A series of related concepts may be woven into an instructional scheme which takes roughly from one to four weeks of classroom time. A number of units, in different school subjects and different grade levels, would be presented. Since children vary in the degree to which they understand concepts, at the time in their lives at which a particular concept becomes meaningful, and in their response to teaching strategies, the unit approach has the advantage of providing opportunities for significant variety in content chronology and methodology. The disadvantages of this alternative are the difficulties of altering curricula and of training teachers in many subjects and grades.

3. **Permeation.** A third strategy is to restructure all existing curricula so that the population problem permeates many topics. Thus, although there may never be a population unit per se, relationships between population and other topics would constantly be noted and examples for emphasizing other learnings would continually be based on population data. The major problem with this technique is that it is difficult, time-consuming, and expensive to alter so many curricula. It also may result in pupils with a wide knowledge of population "facts", but little comprehension of the relationships among them. On the other hand, this approach would be very valuable if the variety of population facts can occasionally be summarized by a unit specifically designed for this purpose.

4. **Through the teacher.** A fourth strategy is to provide pre- and in-service training so that teachers obtain sufficient competence in this area to be able, in turn, to incorporate
population spontaneously into their teaching of other topics. The major problems, of course, is to devise and implement such training programmes. This strategy will, if effective, produce highly motivated teachers. Since this is such an important factor for any educational programme—and specifically ones aimed at attitude change—it should have high priority. Many teachers in the region are inadequately trained even in the more traditional areas of the curricula, however, and it may be expecting too much to hope that they can or will experiment with population education. If, on the other hand, the teachers are given both an adequate training program and some type of instructional curricular materials, the results could prove favourable.

Another aspect of organization brought about by integrating Population Education in the school curriculum concerns the choice of the most appropriate level of education in which to start teaching the concept. This Asian Regional Workshop came up with the position that the elements of Population Education should eventually be incorporated into all levels of the school system. This Workshop also recognized that limitations of human and financial resources demanded that initial programs be somewhat narrower and based on the country's available resources and other factors. However, this Workshop believed that in terms of the need of the region, the priority level was the upper primary level.¹

There are advantages and disadvantages of beginning Population Education in the primary (elementary) and/or

the secondary levels of education. In many countries of the Asian region, a far greater proportion of pupils attend the primary than the secondary schools. A Population Education program in the secondary level is not likely to have much impact because of the small proportion of students actually attending school at this level.

The second advantage of starting Population Education in the primary level is that pupils who attend the village's elementary school, but do not continue to higher education are far more likely to remain in the village and thus are more likely to influence the local community's future opinion. The primary schools represent the major presence of the government in the community, especially in the rural areas. Secondary schools are largely located in towns and cities. Thus, the primary schools have an important psychological influence as the local source of outside wisdom and often extends beyond the pupils to parents and non-school children.

Another advantage of starting the Population Education in the primary school level is the simplicity of adding population content to the primary schools' courses of study because greater flexibility in scheduling is available. At the primary level, a single teacher is likely to remain with a class for most of the school day. It is relatively simple to add another topic to each pupil's program. Still another advantage is that the attitudes
on population content may be formed at a younger age, thus
the appropriateness of starting Population Education on
developmental grounds.

Some of the reasons in favor of starting Population
Education on the secondary level are that secondary school
students are older than primary school pupils and are
closer to the time at which they are expected to make the
behavioral decisions which a population program is designed
to influence. In addition to this, those who attend secon­
dary schools are much more likely to become the middle and
higher level leaders of the future.

In the secondary schools, controversial topics are
more easily understood. The students of the secondary
level are more mature and better able to handle difficult
and controversial topics. It also is considered much
easier to prepare curricular materials for the secondary
level. This has been shown by the curriculum materials
which have been developed so far in several countries
which are largely designed for the secondary school level.
A primary program would need far more materials (includ­
ing teacher-training programs) simply because there are
more primary schools, teachers, and pupils at this level.

Teacher Education

Any discussion of the curriculum aspect of Popula­
tion Education would involve the instructional system.
Proper implementation of a Population Education program
requires the preparation and training of the teachers who are supposed to handle the job. This preparation and training should include the school administrators and supervisors for support. The Asian Regional Workshop emphasized the high priority needs to be given to the preparation and in-service training of teachers, including administrators and supervisors, if the implementation of a population program in the schools is to succeed. The idea that the concept must be explained first to the administrators and supervisors; get them to accept the overall idea, and then the teachers can be motivated, is relevant to this strategy.

This instructional aspect of the curriculum should include the organization of workshops, institutes, seminars, discussions and lectures on Population Education for teacher educators and teachers in training. Curriculum materials in various forms and for various levels should be prepared. It would be useful also, since Population Education is both a national and international concern, to provide further training and scholarship grants for studies abroad in order to build a nucleus for leadership at the teacher-education level.

Research and Studies

Population Education is a relatively new discipline and there is much that is not known about it. It is important to consider the research component in the curriculum
aspects of Population Education. At this point, it is necessary to consider applied or action oriented research that is relevant to the solution of problems. The urgency of demands especially in overpopulated and underdeveloped Asia cannot depend much on basic or pure research. Within this context, a research program for Population Education must place first emphasis on the immediate problems of determining the most appropriate content for school use, and assessing how and when to most effectively and efficiently convey that content. Priorities for research must be carefully established according to each country's needs and available resources.

Other governmental and non-governmental agencies and institutions concerned with population should contribute their findings and studies in order to enrich the content of the programs of Population Education in the schools. Coordination is important.

Administration and Supervision

Population Education in the schools does not need a separate organization as the administrative and supervisory support is built in the existing school organization. The teaching of population uses the facilities and resources of the schools and the communities. What is needed is the enrichment of the course content and processes. Figure 1 suggests how the various institutional, human, and material resources of the community can help to
enrich the program of Population Education.

Figure 1. Model showing how the schools can enrich the Population Education course content and processes.
CHAPTER IV

EXPERIENCES OF CERTAIN SCHOOLS IN MICHIGAN

A look into how the Population Education concept is integrated in the curriculum of certain public schools in Michigan would be useful in placing the Project in perspective. Three schools were considered in this study—the Portage High School, the Mattawan High School, and the Kalamazoo Central High School.

Portage High School

A review of the course guides used at the Portage High School undoubtedly gives evidence that the school includes population information to some extent in the school curriculum. The Curriculum Director of the Portage Public Schools and the Principal Teacher of the High School indicated that population information and concepts of population education are integrated within the existing subjects by chance rather than by design, and is random rather than planned.

The experiences as seen in the course guides are limited and the information and learning activities are not the main purpose of Population Education.

An example is the unit in Sociology--The Study of Man and His Social Surroundings--which focuses on family
relations, group interaction, society reactions, structure and institutions. Some topics for study are Family Marriage and City Population.

In Biology a unit in Ecology is taken up with topics on pollution and environment, while in a unit in Embryology, reproduction is discussed.

These topics briefly cover major related problems facing America—the current issues as they affect population and the environment.

Mattawan High School

An interview with the Principal Teacher of the Mattawan High School and the School Superintendent of the district disclosed that a beginning has been made toward the study of population. Topics for study are not separate units but are integrated within the existing subjects offered.

For instance the topics included in Home Economics are Sexuality and the Teen Years, Home and Family Living, Family Nutrition and Meal Planning, Family Clothing, Infant and Pre-natal Care and Housing and Home Improvement. Population problems are taken up in relation to these topics. In science, the topic Man in Our Society is an investigation of problems in modern American society. The discussion focuses on the urban scene, the youth and the individual in search for a better life. Included in this topic
are problems on air and water pollution, poverty and the poor.

Kalamazoo Central High School

In the Social Studies department, two of the major subjects offered are Home and Family Living and American Problems. In the subject Home and Family Living, some topics which are related to the study of population are Personal Adjustment, Marriage, and Family Living are studied. In the subject American Problems, such topics as Crime and Abortion are taken up. For instance, in the topic Abortion, the laws of the State in relation to the topic are discussed. The aspect of the legality and the morality of abortion are also taken up. One of the major questions under this topic of abortion which the students are supposed to answer is how abortion has affected the birth rate not only in the United States but also of the world.

In Sociology which is another subject offered, the topic of Family and Marriage is taken up, and the problems of population are also discussed.

Sex Education in Michigan

Michigan State laws do not permit sex education courses in the schools. However, the State Board of Education has issued guidelines in 1970 for sex education and family information for local public schools choosing to
conduct courses in sex education. The State Board of Educ‐
tion believed that, within the framework of the law, the
details of sex education programs should be left to the lo‐
cal districts because:

1. administrative and staff competence as well as
parental and community attitudes, concerning the teaching
of sex vary widely;

2. community readiness patterns also vary widely; and,

3. many school districts have been dealing effective‐
ly with sex education for a long time with community sup‐
port, and they already have a high degree of expertise in
this area.

The guidelines stated that understanding human sex‐
uality, as the positive and creative force that it is, re‐
quires consistent and cooperative measures between the home,
the church, and the school.

There is a possibility that the laws of Michigan will
allow schools to teach about birth control and sex educa‐
tion. Recently (May 8, 1973), the State Senate has approved
the bill which would give local school boards the option of
letting teachers talk about birth control in sex education
classes. The bill was sent to the House for approval. It
is pertinent to note that this bill has been defeated in
attempts to pass it dating back four years.¹

¹"Birth Control Teaching Okayed," Kalamazoo Gazette,
This confirms a report of Viedermañ¹ when he said that "There is no evidence that anything new or adequate population education program now exists in American Schools."

Institute for Population Education and Family Planning

One experience which this writer had which contributed a dimension to her knowledge is her attendance at the Population Education and Family Planning Institute at the Michigan State University in East Lansing from June 25 to July 27, 1973. Sponsored by the American Home Economics Association, grants were awarded to 15 home economists from the developing countries presently studying in the United States, and one American citizen. Ten countries were represented in this Institute: Malawi, 1; Zambia, 1; Nigeria, 2; Indian, 1; Trinidad, 1; Ethiopia, 1; Columbia, 3; Thailand, 3; Philippines, 1; and the United States, 1.

This Institute was a five-week study program on Population Problems, Trends, Growth Patterns, Effect on Families, and the Quality of Family Life. It was enriched with lectures of experts, field trips to some Family Planning clinics in Michigan, films on population, and sharing and discussion of country reports which the

¹Viedermañ, Population Education in the United States, op. cit., p. 337.
participants prepared before the Institute started.

The main focus of the Institute was on Family Planning which aimed to train the participants to be able to contribute knowledge on the subject upon return to their home countries. Each participant developed a project making use of techniques, devices, ideas, and methods which can be used in the individual participant's country.

The "population games" were new experiences which could be useful in reinforcing the attitudes and values of students on population and it is expected that decision making may take place as the individuals perceive the problems suggested by those games.

The Institute was very helpful not only to the individual participants but to all who are concerned with the problems of over population. The interaction among the participants coming as they do from the so-called "Third World" where the impact of overpopulation is great and the economic development is slow was very significant.
CHAPTER V

PHILIPPINE EXPERIENCE IN POPULATION EDUCATION

The inclusion or integration of Population Education in the Philippine schools has its legal and socio-economic basis. As stated earlier, Republic Act No. 6365 in 1971 established a national policy on population and created the Commission on Population. This Commission had specific responsibilities, one of which is to formulate and implement a long-term population program which includes population education. In December 1972, the President of the Philippines issued Presidential Decree No. 79 making the population program a vital and an integral part of social reform and economic development thereby giving the national population policy more strength and meaning.

The Philippines, as a member of the United Nations and its subsidiaries, such as the Unesco, the UNICEF, the WHO, the FAO, and others, is deeply concerned with the realities presented by these U.N. subsidiaries in regards to the total socio-economic factors that somehow negate development of countries belonging to the so-called "Third World."

Within the context of the national population policy of the Philippines and the United Nations' concern on
population, the Department of Education has been given the major responsibility of reaching out to the masses through education and seeing to it that the goals of the national policy are achieved. Gen. Carlos P. Romulo candidly stated the position of the Department of Education in regards to Population Education when he stated that "Educational institutions, from the elementary to the post-graduate college years, can perform no more useful service in the seventies than to illuminate the principles of human survival and to dedicate themselves to preserving and enhancing the quality and diversity of life."¹

The Department of Education has embarked upon a five-year project on Population Education (1972 to 1977) which placed a target of 12 million or more students through planned curriculum development, teacher-training courses, and family life education. The objectives of this five-year project are: (1) To study how concepts on population can be integrated in the curricula of elementary and secondary levels of education. (2) To evolve population education concepts that will be integrated in the existing selected curriculum guides of different subject areas in both levels of education. (3) To develop appropriate population education curriculum materials.

Elementary Level

In the elementary grades there are five courses or subjects in which Population Education is integrated—Social Studies, Health, Home Economics, Science and Math—and is taught from Grades I to VI except in Home Economics, which is given only to girls beginning in Grade V.

The scope and content progress from grade to grade and from subject to subject. The scope of the lessons in Population Education is not only limited to the conditions obtaining in the Philippines but also of other countries. One notable aspect of the content of the course guides is the small family equated with better living.

Appendices 1 to 4 are sample course units in Social Studies for Grade I, Social Studies for Grade IV, Home Economics for Grade V, and Science for Grade VI.

Secondary Level

In the secondary level, the course content for Population Education focuses and gets deeper on specific phenomena related to the population issue.

In the subject of General Science, maternal and child health and fertility control are taken up. There are also in this subject, special units in ecology. In Home Economics, which is a subject exclusively for girls, lessons in responsible parenthood, family planning, and maternal and child care are given. The role of the girl as a
future mother is seen as a crucial one. Hence, the
repeated emphasis on the need for small families. In the
Social Studies, the lessons in Population Education stress
not only the subject of population growth per se but dis­
cuss relevant national social problems, unemployment,
rural and urban life, and other related issues.

In addition to the activities which are convention­
ally used, the techniques of research and inquiry are uti­
lized in dealing with topics or problems which only limited
knowledge is available. Resource persons are utilized
more extensively.

Appendices 5 to 7 are sample course units in Philip­
pine Community Life (Social Studies) for the First Year,
Biology for the Third Year, and Home Economics for the
First Year.

**Higher Education Level**

The Department of Education has directed that courses
in family planning which is an aspect of Population Educa­
tion should be added to the curricula of medical and nurs­
ing schools, and all institutions with students enrolled
in midwifery and social work schools. Graduates must have
completed study of family planning before they may qualify
for licensing in their profession.

**Regional and National Efforts**

The Unesco Regional Office for Education in Asia
held a Workshop on Population and Family Education in Bangkok, Thailand on September 7 - October 7, 1970. This workshop, participated in by educationists from 13 countries\(^1\) developed samples of instructional materials and guides for Science and Math and for Social Studies. This workshop also made recommendations to the participating governments.

In 1971 (May 10 to June 4), a national summer workshop on Population Education was held by different groups of selected teachers representing four subject-areas (Home Economics, Social Studies, Science and Health) and developed course guides integrating Population Education with each of the four subjects.

The course guides were tried out during the school year 1971-1972 in selected schools on a pilot basis. Each pilot school was given leeway to determine its own try-out strategy.

At this time of writing, the reactions and feedbacks from the participating pilot schools are being analyzed for consideration in improving the course guides which will eventually be used all over the country.

The Philippine program is characterized by a diversity of approaches, both in terms of institutional settings—private, university-based, and within the Department of

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\(^1\)The participating countries were Afghanistan, India, Indonesia, Iran, Japan, Laos, Malaysia, Nepal, Pakistan, Philippines, Taiwan, Thailand, and S. Vietnam.
Education—and in terms of subject matter, ranging from the traditional sex education to population education, in the sense of the terms used in this project. A Population Education Program (PEP) unit has been established within the Department of Education to coordinate the various approaches with a grant from the U.N. Fund for Population Activities. In 1972 the program moved into the first stages of a five-year implementation plan and by this year (1973) some classroom materials are already in use.
CHAPTER VI

IMPLICATIONS OF POPULATION EDUCATION TO THE PHILIPPINES AND SOME RECOMMENDATIONS

Set against the framework of national development, population education has tremendous implications to the Philippines. A belief was advanced by Kuan Tsu, a Chinese philosopher of the Third Century BC that:

If you are thinking a year ahead, sow seed.
If you are thinking ten years ahead, plant a tree.
If you are thinking one hundred years ahead, educate the people.¹

This belief is remarkably contemporary today and the message suggests the important role of the schools in educating the people about the concepts of population and all its aspects.

The Philippines is perhaps fortunate to have an organization—the school system—which can be an effective agency for pursuing the goals of population education. The public school system has subsidiaries and personnel that can be utilized in pursuit of these goals. In fact the school system has already embarked, though modestly, on a national program of population education. The Adult and Community Education Division of the Bureau of Public

Schools have on-going projects which combine population and family planning information with its program of functional education. The Population Education Program Unit of the Department of Education referred to earlier in Chapter V has been established to coordinate the various approaches to the population education program.

Since the schools are undoubtedly the agency that reaches the most remote barrio (village), the role of the schools becomes doubly significant. This means that the first line of concern should be the teacher who is considered, for all purposes, the "problem solver." The central problem, therefore, is how to help the teacher perceive the concept of population education within the context of the goals and objectives set by national policy. Thus, the teacher can relate his own experiences, actions, and decisions to the processes which produce change in values and attitudes and perhaps act in response to the information about alternatives or options available to him.

This project submits the thesis that the first and foremost implication of the population education program is for the teacher to be able to be effective in teaching the concept at all grade levels to insure understanding of the values, attitudes and behaviors related to population issues. The difficulty of this task is compounded by the fact that teachers have also internalized the values of
his society and may consciously or unconsciously hold values and attitudes that reinforce the pronatalist structure.

Teacher-education is viewed as the significant first line of concern in this national program.

Another implication that can be drawn from this program is the policy orientation of population education. Subject-centeredness is still one of the characteristics of the present school curriculum, and there is a difficulty in restructuring the present curriculum and developing an approach to instruction in population education which will make its integration easier and readily acceptable. Many teachers have participated in developing curriculum materials for use in the schools in certain subjects. Related to this is the vital role of administration and supervision. As stated earlier, the administrators and supervisors need basic knowledge of and orientation on population education in order to insure support for the program. A direct approach to changing basic values and attitudes may not be effective and may even develop a resistance to change. The population education program should in no way attack or confront directly the value orientations that the present society holds but to point out the need for change in the traditional values and attitudes.

Still another implication that can be drawn from this program is the need for the involvement of all agencies
available in the community—government or non-government—in order that the program in the schools can draw support, strength and effectiveness.

The basic objective of the program is the promotion of the quality of life. Economic growth is known to increase material wealth, but unfortunately this phenomena of growth in economics has brought about a number of side effects as each individual tries to increase his own benefits in an increasingly crowded environment.

While one of the goals of education is to help people achieve quality of life—and the term quality may be situational—education must stress the need to protect the environment against further abuse and ruthless exploitation. In a developing country such as the Philippines, the quality of life should focus toward the provision of adequate food, clothing and shelter—the basic needs of man—and an opportunity to an education.

Some Recommendations

The Unesco Asian Regional Workshop concluded that the following recommendations should be taken up and this writer considers them relevant to the present project.

1. Population education should become an integral part of teacher-education programmes at all levels. This may be a separate course, or its elements may be incorporated in the existing curricula.
2. Attempts should be made as soon as possible to organize seminars, workshops, discussions, institutes and lectures on population education for teacher educators and teachers in training.

3. Workshops should also be organized to develop curriculum materials in various forms (curricula guides, source books, etc.) for teacher education.

4. In-service training programmes for population education should be organized. Follow-up programmes may also be taken to evaluate their effectiveness systematically.

5. National governments (and other agencies) should make available fellowships for studies abroad for teacher-educators in this field, and thus build a nucleus for leadership at the teacher educator level.

This writer would like to add that, as soon as practicable, the course guides should be circulated for general use in the field.

A Look Ahead

As this project looks ahead, the greatest challenge facing the schools today is the necessity of educating children to survive in a healthy world with a fair amount of decency and quality of life. Population education is a response to a socio-economic problem and is the result of national policy. While population policy is a public policy, one cannot talk about it without considering the ethical or moral values. Deciding public policy is deciding what should be done including what is morally required to protect the freedom of people, to promote the general
welfare and the survival of society. Of course, public policy may not always meet these norms, but few doubt that this is what public policy should be.
REFERENCES

Books


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Magazines and Publications


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_State of the Nation_. Message of the President of the Philippines to Congress, Manila, January 1970.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


State Board of Education. "Sex Education and Family Information: Guidelines for Local Public Schools Choosing to Conduct a Sex Education Program." Lansing, Michigan, August 1970.


Addresses


APPENDICES

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Appendix 1

Sample Course Guide in Social Studies
Grade I

Unit. The Family

Objectives.

1. To compare the size of one's family with that of others.

2. To discuss how one can find enjoyment in one's family.

3. To enumerate the reasons why some families are small and others big.

Concepts.

1. Families vary in size.
   a. Some families are big.
   b. Some families are small.
   c. Some families do not have children at all.

2. One finds enjoyment in playing and working with one's brothers and sisters.

3. Some families are small because:
   a. Some children died.
   b. Some children are born far apart.
   c. Some children are born late.

   Some families are big because:
   a. No children die.
   b. Children are born almost every year.

Learning Activities.

1. Talking about one's family; identifying members of one's family.
   a. Comparing one's family size to the family of other children in the class.
2. Learning songs and rhymes about the family.
   a. Recalling and discussing situations in which one finds enjoyment in the family.

3. Discussing the reasons why some families in pictures are big or small.
   a. Interviewing some parents on the reasons why they have big or small families.
   b. Listening to resource persons on the reasons why some families are big and some are small.
Appendix 2

Sample Course Guide in Social Studies

Grade IV

Unit. Life Among the Filipinos Continues to Change.

Objectives.

1. Understand that the decrease in death rate helps increase population growth.

Concepts.

1. The advance of science and technology helps increase population by decreasing the death rates. Modern science and technology help achieve the following:
   a. improved sanitation
   b. improved personal hygiene
   c. elimination of parasites, infections and contagious diseases.

2. Over population creates health and sanitation problems.
   a. nutrition
   b. sanitation
   c. sewage and garbage disposal
   d. water supply
   e. housing

Learning Activities.

1. Asking pupils how these problems could be solved.

2. Asking pupils to bring pictures depicting problems of population growth and pictures depicting ideal life setting involving nutrition, sanitation, housing, etc.
Appendix 3
Sample Course Guide in Home Economics
Grade V

Unit. Understanding Myself

Objectives.

1. Accept one's sexuality.

2. Compare the budgets of family income of a big family and a small family.

Generalizations.

1. Physical changes at puberty such as the development of the breast and appearance of pubic hair are normal phenomena which one should not be ashamed of. Breasts are source of life and nourishment and not an invitation to popularity contests.

2. The physical and emotional reactions of boys and girls vary greatly. A boy usually has intense physical drive so girls should avoid intimate contact with boys.

3. Big families require more money to provide the basic needs of the family.

4. The smaller the family, the easier it is to budget the family income.

5. Increase in family members does not guarantee increase in family income.

Strategies.

1. Survey attitude toward sexual changes taking place among boys and girls.

2. Have role-playing depicting daily life situations in a small and big family; during mealtime, at bed time, and during housekeeping activities.

3. Make pupils analyze the budget for a big family and compare with the budget of a small family, both having the same income.
Appendix 4

Sample Course Guide in Science

Grade VI

Unit. Our Earth in the Universe

Objectives.

1. Formulate hypothesis based on observations and inferences on population situations.

2. Predict the effect of over population.

3. Describe how men control some forces.

Generalizations.

1. Overpopulation of the land areas of the earth tends to make use of the water area of the earth's surface. Overpopulation of the earth forces scientists to explore the outer space.

2. One-fourth of the total land area of the Philippines is under cultivated and would help solve the food problems of the people if utilized properly.

3. The Philippines ranks sixth in Asia in terms of population.

Strategies.

1. Viewing films on population which have bearings on housing problems.

2. Predicting what is to happen if the land area of the earth's surface is overpopulated.

3. Graphing interpretation of the ratio of people to land area; size and population of countries.


5. Predicting the ratio of the world's population at present and that of the year 2000.
Appendix 5

Sample Course Guide in Philippine Community Life

First Year

Unit. What are the characteristics and problems of rural life?

Concepts.

1. Density of Population
   a. The density of population in our rural communities is fast increasing.
   b. The once wide land areas for cultivation per capita is fast decreasing.
   c. The foods produced for once a smaller number of people is now shared by many.
   d. Population is increasing at a rate much beyond our industrial growth.
   e. Economic growth gained for years are wiped out rapidly because of our rapid population growth rate.

2. Social Unity in the Rural Areas
   a. The familistic and kinship value in the entire strata of Philippine society encourages enlargement of the family clan.
   b. Our Catholic values regard marriage as an unending union of man and woman for the primary purpose of procreation and mutual help greatly influence rapid population growth.
   c. Acceptance of children as future providers. Aged parents and relatives who are financially unable are taken cared of by other members of the family.
   d. Acceptance of children as economic assets. Filipino parents believe that children would surely contribute much to the family coffers or help further the family fortunes.
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e. Acceptance of children as political and social influence. Social identification with a large family group is greatly desired by Filipino society.

3. Our rural population is young in structure and is unfavorable toward economic development.
   a. Forty-five (45) per cent of our population is of ages 15 and below.
   b. Youngsters belong to the high consumptive, low-productive age group.
   c. Large population of young people requires that a large part of our resources be allocated to educational and social investment.
   d. Young people below working age tend to reduce input per capita.

4. There is a larger proportion of big families among our married couples in rural areas than in urban areas.

5. Wholesome recreational activities in our rural areas will help decrease population growth.

Learning Experiences,

1. Listing the advantages and disadvantages of having a big family, and making generalizations.

2. Listing accepted generalizations.

3. Discussion of concrete situations.
   a. Compare two families each having 8 children. Family A has 8 children with ages ranging from 1 year to 16 years; family B has 8 children with ages ranging from 12 to 28 years, with four children working. Which of the two is financially and emotionally secure?
   b. At random, get 5 married uncles in the cities and another 5 in the rural areas. Who among your uncles have big families, or small families, and tell how they live.
Appendix 6

Sample Course Guide in Biology

Third Year

Unit. New Biology develops scientific attitudes and methods in approaching and solving personal and biological problems.

Objective.

Awareness of the scientific approaches to eradicate superstitious beliefs and erroneous traditions.

Concepts.

1. Prolonged breast feeding does not prevent conception.

2. Ignorance of the human reproductive system leads to big family size.

3. Ignorance of contraceptives hinders couples from practicing family planning.

Teaching Strategies.

1. Relating stories about superstitious beliefs that have bearing on human reproduction.

2. Talk by a resource person on the topic of superstitious beliefs and erroneous native traditions.

3. Buzz session: How to eradicate or overcome superstitious beliefs.

4. Enumerating scientific steps to be observed to do away with false beliefs.
Appendix 7

Sample Course Guide in Home Economics

First Year

Unit. Living with the Family.

Objective. Realize and appreciate the value of having a small family for the development of a healthful and progressive family.

Concepts.

1. Home and family life become wholesome and satisfying when the physical, psychological, and economic needs are met.

To meet human needs is to promote human life.

Health, education, and other opportunities for children may be more adequately provided for a small family.

More time for family togetherness is available in small families.

2. The saying that "too many cooks spoil the broth" relates to the concept that "too many children upset the homely atmosphere."

3. Awareness and acceptance of the roles that the family members play, promote wholesome, healthful and progressive family living.

Learning Experiences.

1. Discuss the different aspects of human life by showing pictures of families from which the students can derive their ideas in the following:

a. physical needs
b. emotional and spiritual needs
c. psychological needs
d. social needs
e. economic needs

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2. Home visitations

   a. Conduct group interviews of families of different walks of life.

   b. Observe differences why some homes are comfortable, while others are not.

   c. Total class discussion of the results of the home visits giving emphasis on the advantages of having small family than of big family.

3. Role playing: mother, father, and children or child. Show how each member of the family may contribute to make the home comfortable.