The concept of population education has recently been broadened to include educational programs throughout formal and nonformal education settings. The scope and emphasis of population education is discussed, and a schematic matrix is presented for analyzing and planning the content of population education programs. The current status of school- and nonschool population education in the developing nations of Asia, Latin America, and South America, and, to a lesser extent, Africa, is discussed. The two categories of nonschool population education programs, literacy education and community education, are examined. Needs and responses necessary for effective population education are also discussed. (For related document, see AC 014 389.) (KM)
A headline in the New York Times for April 4, 1973 read: "As Birth Rate Drops, So Does Interest in It." For anyone who has followed the ebb and flow of public concern over population matters during the last decade the headline did not come as a surprise. In fact, it was anticipated. And, should present trends continue for any reasonable period of time, and should the birth rate continue to decline, another set of headlines in the morning papers might be soon upon us. "PPG (Positive Population Growth) Calls for Increased Fertility to Offset Population Decline." And so it goes. The long time spans needed to deal meaningfully with population phenomena lead all but the most hardy to lose interest within reasonably short periods of time. Furthermore, lacking in population literacy, the American people are easily confused by demographic phenomena, and particularly lack any sense of the consequences of population change. The population problem is too often assumed to be a problem of explosive growth, of too many births most Americans would suggest. Let the poor and the blacks control their fertility, they would argue, and then things would be well in this country. Other fallacious arguments would be marshalled, almost certainly centered around fertility and to a lesser degree mortality. Little mention would probably be made of distribution as part of the population problem. So it goes, and thus the role of the educator.

In the Third Century BC the Chinese writer Kuan-tzu proposed 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.

Perhaps with the passage of the centuries as communications have speeded up, the writer's time spans have changed. The message is, however, clear. To deal effectively with long term problems education is a potent tool.

Population education is a fairly recent invention, having its beginning in the mid-sixties with Sloan Wayland's work under Population Council auspices. Until recently the term has been synonymous with programs for the formal school system. But in the last year or so, the concept has broadened to include educational programs in the entire range of formal and nonformal education settings. Primary and secondary schools,
universities and teacher training colleges have always been seen as foci of attention for population educators. But now, here and in the rest of the world, attention is also being directed to extension programs (whether in New York State or in India), to community development, to labor education, to literacy programs, and the like. Slowly educators are beginning to look at the educational system as a whole, trying to plan programs for the system, rather than for each of the component parts as if they existed in a vacuum. The audience includes school children, out-of-school youth, and adults in a variety of settings.

Population education may be defined as the educational process whereby individuals learn (1) the causes and most important the consequences of population phenomena for themselves, their communities, and the environment, and (2) the possible effective means by which the 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.

The emphasis in this definition is on learning rather than teaching. It assumes that the average individual is more concerned with the consequences of population phenomena as they affect his own life in his family and community, than with the causes of these phenomena, and focuses on these consequences in order to enhance learning. Lastly, it focuses attention on those things that the individual can do, as an individual and as a member of society, in order to influence population changes for his own benefit and for the benefit of the society. It follows naturally from this definition that for learning to be effective population phenomena at either the macro or the micro level must not be seen as isolated phenomena, but rather as part of, affected by and effecting, an integrated developmental process. It is anticipated that as a result of increased awareness both of the consequences of population changes and of the consequences of their own population related behavior individuals will be able to make better informed, conscious decisions concerning their own behavior, both individually and as members of society.

The Knowledge Base and Planning for Population Education

The content of population education covers a broad range of subject matter, much beyond traditional demography. It includes information on: the population situation (size; growth, migration, distribution trends); on the relationship between population and the quality of life now and in the future (for example, food, health, education, employment, urbanization, the environment, socio-economic development, and family life); on possible action programs (both governmental and individual); and on human reproduction as a means of implementing one aspect of individual actions (human physiology, human sexuality, family planning, and contraception). Both macro and micro level data are included. The exploration of values and attitudes is also seen as an integral part of the learning process.

Since most, although not all, nonschool education is directed to audiences already in the reproductive ages the focus is often on content which might contribute to the acceptance of family planning and contraception, and might stress, for example, the affect of family size on family life, health, etc. Other nonschool programs are directed to elite audiences hoping to obtain their interest in and support for population policies. The focus in these programs might be on the relationship between population change and the quality of life. In all nonschool programs
the goals of the program, the socio-cultural characteristics of the society, as well as the life experiences of the participating individuals, help determine the content of the programs. Unfortunately, the knowledge base from which program content can be developed is weak in many cases. The individual learner is most concerned with the consequences of population changes at the micro-level, whereas most demographic research until recently has been primarily concerned with the determinants of change at the macro-level. Therefore, more social research is urgently needed, for example on the relation of population change to various aspects of family life and to the quality of life.

School programs cover a wide age group. By far the largest proportion of students in schools in the developing world proceeds no further than the primary level. But as a result of late first enrollments and considerable repetition of grades, many primary school students are already in or very close to the reproductive ages, although age of first births varies widely from country to country. The focus of programs directed to these students is usually on the nature of the family and family life, and the impact of population. The smaller group of students who stay in the formal education system through secondary school, and even university, represent a latent elite. They are often the people who will assume positions of leadership in the years ahead. Programs directed to them, therefore, may emphasize more policy related issues, such as the relationship of population change and the quality of life.

The broad scope of population education content touches in one way or another on most subjects included in the school curriculum. As a result, in most programs population information and analytical skills are being infused into the already existing programs presumably as appropriate to the intellectual and emotional level of the students' development. Evaluation of the effectiveness of this infusion approach, in relation to other approaches such as the development of separate units or courses, is part of the future agenda for the field. Decisions as to what actually should be included in the school program have been based upon: (1) political and cultural circumstances (for example, the acceptability of talking about population or sexual matters); (2) an assessment of the school's ability to deal effectively with certain concepts, particularly those that are personal and potentially sensitive (such as contraception and sexuality); and (3) the goals and objectives of the program.

It is often argued that school programs should focus their attention on the primary level since most children in the developing world receive no further formal education beyond that level, and because these are believed to be formative years in terms of development of population-related attitudes, particularly with regard to fertility. There is an implied assumption that this will be the last or only time that the students can or will be exposed to population-related materials. If this were so it would be unfortunate since it is at the primary level that the knowledge base for population education programs is weakest. We know little about the nature of population learning, nor do we have the content of population education sufficiently well developed to prepare materials that are simple without being shallower. Furthermore, we do have some indication, at least with reference to literacy and numeracy, that knowledge and skills are lost if children do not continue their education.
Until recently plans for developing population education programs -- whether school or nonschool -- were developed independently of one another, as if each of the component parts existed in a vacuum. However, stemming from the growing awareness that learning takes place in different settings and at different times, population education planners are now beginning to look at the educational system as a whole, including school and nonschool. Table I suggests a schematic matrix for analyzing and planning the content of population education programs. In order to determine which cells will be filled, and which left blank to be filled by another part of the education system, the planner needs: (1) a broad and encompassing set of goals and objectives; (2) an assessment of the strengths and weaknesses of the various institutions within the system with respect to these goals and to the handling of the particular content; and (3) information concerning the socio-cultural characteristics of the society. It is assumed that, to the extent possible, each individual should receive the maximum amount of information, limited only by the level of his intellectual development and capabilities.

Adoption of this overall population education planning concept has obvious implications for the organization and administration of programs, as indicated in Figure I. A unit is needed to assume responsibility for developing educational goals and objectives, and for coordinating the activities of the whole range of educational institutions and organizations that may contribute to population education either through action programs or through training and research activities. Cooperation between a range of governmental agencies now involved in educational programs will be required. School programs will have to come under the aegis of the Ministry of Education which may also have responsibility for some aspects of nonschool education. Other Ministries, including, for example, Agriculture, Labor, and Social Welfare, will have relevant educational programs under their jurisdiction that must be coordinated with each other and with school programs. For overall planning to be effective patience will be necessary.

The Status of School Population Education in the Developing World*

A review of school books and curricula around the world would undoubtedly show that virtually all countries include population information in their school programs. The inclusion of these population materials and concepts is, however, by chance rather than by design, and is random rather than planned. The information serves goals that may be complementary to those of population education, but which are in the final analysis different. Population education, by definition, is a program which is planned, integrated, and sequential.

Population education programs can be seen as a part of a total population communication effort, and are clearly the school system's response to the identification of population problems in the society. At the same time it is important to recognize that these programs have validity in purely educational terms as well, educating students to understand the world in which they live.

The Population Situation

Population and the quality of life including:

- Action programs
- Literacy programs
- Adult education
- Out-of-school programs
- Primary schools
- Secondary schools
- In-service training
- Teacher training
- Universities

Table 1: Matrix for analyzing and planning the content of population education system

<table>
<thead>
<tr>
<th>Universities</th>
<th>Adult Education</th>
<th>Out-of-School Programs</th>
<th>Primary Schools</th>
<th>Secondary Schools</th>
<th>In-service Training</th>
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</tbody>
</table>

Family Planning & Contraception

- Human Sexuality
- Human Physiology
- Individual & Family Choices
- Public Policies & Programs
- Family Life
- Socio-Economic Development
- Environment
- Urbanization
- Employment
- Education
- Health
- Food
- Trends
- Migration
- Distribution
- Growth
- Size

The Educational System:

Population and the quality of life including:
In this chart, the non-school unit has primarily a coordinating function. In some cases, however, a regular project staff, such as for school education, may be called for.

Adapted from J. E. Jayasuriya, Communication 9 July 1972, UNESCO Regional Office for Education, Bangkok.
Formal work in population education had its beginnings in Asia, and a number of countries on that continent represent the furthest development of the field to date. Since many Asian countries were among the first to recognize and accept population as a problem, and to mount national programs designed to deal with the problem, it is not surprising that they should also have been first to develop school education programs as part of or as a supplement to a national population policy.

India was among the first countries to accept the challenge of school education about population. The initial interest and impetus came not from the educators, but from the government and private family planning programs. A number of seminars helped to focus attention on the subject, and provided impetus for governmental action leading to the development of a Population Education Cell within the Ministry of Education's National Council of Educational Research and Training (NCERT). The Family Planning Association of India, through its national headquarters in Bombay and through a number of its state affiliates, has continued to play an active role in the field, as has the Central Health Education Bureau in the Ministry of Health. At the same time the NCERT program has flourished, and is extending its efforts into the states. Interest has also developed in a number of universities and teacher training institutions, and through the federation of teachers, providing a fertile climate for a diversity of approaches to this new field.

Iran was also one of the first countries to express an interest in school education. By the end of the sixties the Family Planning Department of the Ministry of Health was able to convince its colleagues in the Ministry of Education that population materials should be included in the texts. No formal program has as yet been developed within the Ministry of Education, but some materials in population are being made available to secondary school students, and new plans are being developed in the government and in the Teacher Training Colleges to expedite program development.

In Korea the Central Education Research Institute assumed early responsibility for the program development effort. Careful studies of texts already in use and of students' and teachers' knowledge of and attitudes toward population concerns, have provided important baseline data for curriculum and materials development which was begun in 1971. The regularly scheduled revision of primary school social studies texts in the summer of 1972 provided an opportunity for the inclusion of population materials therein, and work is progressing at other levels as well.

The Philippines program is already characterized by a diversity of approaches, both in terms of institutional settings — private university-based, and within the Ministry of Education -- and in terms of subject matter — ranging from traditional sex education through to population education, in the sense of the term used here. A Population Education Program (PEP) unit has been established within the Bureau of Public Schools to coordinate the various approaches, and a sizeable project grant has been obtained from the UNFPA. In 1972 the program moved into the first stages of a five-year implementation plan, and by 1973 some classroom materials were already in use.

Indonesia's newly developing program is extensive, attempting to coordinate educational programs both in and out of school, each being
supportive of the other. Planned programs are being developed both through the Ministry of Education and through the private schools of the Muslim Association, with assistance from the World Bank and the UNFPA.

Late in 1971 and early in 1972 seminars and workshops in Thailand, Malaysia, and Sri Lanka brought together population specialists and educators as the first step in the development of a population education concern within the educational community. Malaysia and Sri Lanka have received UNFPA support to proceed with program development, mainly in the schools.

During the spring of 1973 Thai educators developed a comprehensive draft plan for submission to the government for a coordinated school-nonschool program. Thai educators are also discussing the possibility of a pilot project to test the various approaches to population education—infusion, the development of separate units to be used in existing courses, and the development of separate courses—in order to determine which approaches are most effective at which grade levels.

During the summer of 1972 educators from four Asian countries—Indonesia, Malaysia, the Philippines, and Thailand—participated in a Workshop held at the East-West Center devoted to the planning and implementation of population education programs in school and in nonschool settings. Teams from governmental and private agencies developed plans for the implementation of program ideas and considered problems of the development of content, teacher training programs, pilot programs, and the need for research and evaluation.

In Latin America population education has been slow to develop largely as a result of controversy concerning the meaning and consequences of population growth for national development. Population education is viewed by many as population control education. Although this is not, or need not be the case, political problems are often raised when it is discussed.

A Chilean program developed in the late sixties represents an interesting case. Interest in the systematic inclusion of population concepts and data in the curriculum did not arise as part of a national or private population or family planning effort. Rather, it developed as a result of the interests and competencies of specialists who were involved in the revision of the national social studies curriculum that began in the mid-sixties. Emphasis in the program was on the development of demographic and population-related concepts that would help the student to understand the socio-economic causes and consequences of population change. Education, not propaganda, was clearly the goal. The concept of the program could hardly offend the staunchest supporter of population growth. Unfortunately, no information has been available since late 1970 on the further development or implementation of the program.

In Colombia, leadership in the development of population education has been assumed by the Population Division of the highly respected Colombian Association of Medical Faculties (ASCOFAME), and by a group of educators and specialists at the University of Valle in Cali. ASCOFAME has focused on sex education, but has recently indicated an interest in including "demographic education" in their program. At Cali an attempt is being made, with UNFPA assistance, to integrate population, sex and ecological education into one package that is educationally sound, responsive to perceived societal needs, and politically acceptable.
Through their efforts, which are separate but complementary, they hope to train teachers, and develop curriculum and text materials that will be acceptable to the Ministry of Education.

With the exception of these efforts, and recent indications of interest in El Salvador, Guatemala, and Panama, population education is more argued than practiced in Latin America. Primary emphasis in most countries has been on the development of sex education programs, usually with the support of Catholic leaders. The focus is less on the individual's responsibility for his actions or on the consequences of population growth than it is on solving the problems created by high rates of out-of-wedlock pregnancies, illegal abortions, and venereal disease. Within a Latin American context these are important and real problems, and the development of sex education programs as a response is valid and important. It is questionable, however, whether these programs, generally devoid as they are of population content, can serve as an adequate response to the need for greater population awareness necessitated by high rates of population growth, heavy migration from the countryside to the city, and problems of economic and social development.

Only one country in Africa -- Tunisia -- has become involved in the development of a school population education program. Beginning in 1969 a small group of educators, working in the Institute of Educational Sciences of the Ministry of Education, attempted to develop population awareness materials for the primary grades. But interest has declined in the last year or so, and no further program development seems likely in the immediate future.

In sub-Saharan Africa the multi-national African Social Studies Program is presently seeking support for the systematic development of population education materials for schools in the twelve countries affiliated with them. They hope to have their program underway before the end of 1973.

In summary, despite increased levels of activity in the last few years, there is as yet no national or local population education program that is fully operational. Very few of the programs have materials already in use in a large number of classrooms, and none has a usable and tested sequence that covers the entire span of primary and secondary schooling. It may be some years before a full program exists, for the development of a school program with extensive needs for teacher training, curriculum development, research, and evaluation is necessarily a slow and painstaking process.

The Status of Nonschool Population Education in the Developing World*

It is doubtful that anyone has a comprehensive picture of nonschool population education in the developing world today. Within the United Nations system itself, a number of the specialized agencies have extensive

*Portions of this section are adapted from David Kline and Thomas B. Keehn, "Nonschool population education," prepared in January 1973 for Bogue, Johnson, Wilder, eds., Population Communication: Overview and Outlook (tentative title), forthcoming. The author wishes to acknowledge with gratitude Messrs. Kline and Keehn's permission to use their material.
programs planned or in process. ILO has population education programs for workers and employers in various parts of the world. FAO's Program for Better Family Living incorporates population-related concepts and materials into their activities directed to rural populations. UNESCO's programs in literacy, in education for rural development, and for youth either have or are planning population components. UNICEF and WHO also have relevant program activities.

Private organizations are also playing an important role. For example, IPPF has a particular interest in educational programs for out-of-school youth, and is planning a major workshop on that subject for the Asian region in 1973. World Education (New York) has provided technical assistance and financial support to a number of experimental family life planning projects in different parts of the world.

Examples of nonschool population education programs can be broken down into two categories: those dealing with literacy, and those concerned with community education.

1. **Literacy Programs**

As with school population education, nonschool programs seem to have had their beginnings in Asia, and particularly in India. Literacy House in Lucknow, particularly through its Young Farmers Institute and Family Life Center, have been involved for years. They pioneered in the development of materials for new literates on population and family planning. More recently Literacy House South, a part of the Andhra Mahila Sabha in Hyderabad, has also begun to develop family life planning materials. Two workshops were held during 1972 devoted to the planning and development of functional literacy and family life planning projects. Nineteen separate proposals for programs in various parts of the country were developed, and funding is being sought so that they might be implemented.

In Thailand, the Division of Adult Education of the Ministry of Education has been operating a pilot functional literacy project in North Thailand since 1970. The aim is to provide functional education that will assist the learner to live more efficiently and productively in his own environment. Program content is developed in response to the learner's own perception of the obstacles to social and economic development he encounters in everyday life. Emphasis is placed on the broad needs of the family unit and emphasizes earning a living, family economics, health and family planning, and civic responsibility. The program is now being revised and expanded to other parts of the country as an integral part of the regular educational structure of the country. Efforts are also being made to integrate family life planning concepts into other adult education programs under the auspices of the Ministry of Education and other Ministries.

In Turkey the Ministry of Education, in cooperation with the Ministry of Health, is running a pilot literacy and family life planning project in five provinces. New materials, all including population content, have been developed, and teachers have been trained for thirty experimental classes. These materials are also being used in experimental classes in the Turkish army's educational program for illiterate conscripts. The program will eventually reach some 50,000 adults annually.

In the Philippines the Rural Reconstruction Movement, and the Community
and Adult Education Department of the Bureau of Public Schools have projects in process which combine population and family planning information with functional education.

In Costa Rica the Demographic Association, the National Council on Population, and the Ministry of Education are designing and testing four texts on population and sex education to be used at various literacy levels.

2. Community Education

The Ministry of Education, Community Education Department in Indonesia, is developing a project geared to the needs of a culture that traditionally transfers information through a wide range of non-written media. In addition, a Communications Service Center for Family Life Planning has been set up as part of the Department of Education and Culture. They have been collecting and testing already existing materials, especially those aimed at rural audiences of low literacy levels. At the same time they are assessing the needs of various audiences for new materials, and developing a wide range of materials to fill particular needs. These materials will eventually be absorbed into the newly emerging Development Schools System which is an attempt to make education lifelong, to make it relevant to the needs of a developing society, and to bridge the gap between school and community.

In Malaysia the Federal Land Development Authority and the Malaysian Trade Union Congress are both developing programs. The former is concerned with improving the quality of life in selected re-location areas, and the latter with improving knowledge and awareness among labor and union members.

The Colombian Family Planning Association (Profamilia) and the Coffee Workers Association are cooperating on a pilot project in the Department of Riseralda. The existing community education programs of the Coffee Workers Association and other nonschool educational organizations in the Department will add population and family planning concepts to their curricula. These programs range from literacy and adult education to community development.

Late in 1972, a two week seminar was held in East Africa to consider the incorporation of nutrition and family life planning concepts into community education programs. Participating countries included Kenya, Tanzania, Uganda, Zambia, Ethiopia, Botswana, Lesotho, Ghana and Nigeria. It is expected that a number of projects will be developed.

In Kenya the FAO Program for Better Family Living is developing materials to include population and family planning into community development programs for rural areas.

In summary, there is much activity in the area of nonschool population education. A survey of existing and planned activities would be useful, however, to assess the present state of the field and the degree to which activities are complementary or overlapping. This would also aid in the diffusion of innovation and tested program ideas.
Needs and Responses

Population education programs must be developed at the national or subnational level taking into account the socio-cultural characteristics of the nation and its subgroups. In order to move ahead, a favorable climate of opinion among responsible leaders in population and in education must be created in order to insure the necessary political and administrative support. Skilled manpower to plan and implement the programs must be trained. The necessary coordinating units must be established to administer the programs, and to develop policies, objectives and priorities for program development. National and research institutions must be developed to provide intellectual support within the country, both in terms of the content of population education, and in terms of the process of population learning. Materials for teachers and for learners must be written, tested and revised prior to widespread dissemination. Teachers must be trained. Research and evaluation programs must be designed to support activities at all stages of program development.

Population libraries and information centers have a critical role to play at almost every stage of program development. They must be active participants seeking out materials and disseminating them to those who need them, not simply repositories of information waiting to be used.

Population libraries and information centers (PLICs) can collect, catalog and annotate learner and teacher materials from their own countries, from their regions, or from the world to assist persons working in the field know what is being done, and to avoid duplication of effort. Reports on program planning and program evaluation collected and disseminated to the right persons at the right time can greatly assist in the process of diffusion of program innovation.

PLICs, working along with specialists in the field of population education, can assist with the translation and dissemination of important materials from other languages that would be otherwise unavailable to educators in other countries. Similarly they could assist in the preparation and dissemination in popular form, for teachers and other lay audiences, of the products of population-related research done at population research centers throughout the world.

Much of the literature in the field of population education today is fugitive in that it has not been published but exists as a mimeographed document mailed to a small number of the author's closest associates. The photocopier permits circulation to a second range of people -- a smaller number of associates of the original recipients. Those few things that are published are either in reports of national seminars, which have limited circulation, or in journals whose primary focus is other than population education, and therefore not read by even a majority of the small number of specialists in the field.

Discussions are going on concerning the development of an annual or semi-annual publication to bring together the best writings in the field. In the meantime, however, there is an imperative need to develop an abstract publication, perhaps along the lines of the Population Council's Current Publications to bring the fugitive literature to a wider audience. This might well be combined with a reproduction service, similar to that
offered by the Simon Population Trust or the East-West Communication Institute Library, to make the materials available free or at low cost to those that need them.

Corollary to this would be the development of special population education repository libraries in each country to insure that at least one copy of all the most important work in the field is within the reasonable access of educators in that country. An international advisory committee of population educators, working with APLIC and its sister organizations in other parts of the world, could develop such a program within a reasonable period of time. The activities on a regional scale of the population education clearinghouse of the UNESCO Regional Office for Education in Bangkok should be reviewed for light that might be shed on what is most needed.

Reference has already been made to the problems of the knowledge base for population education. Here again collaboration between PLICs, population educators, and scholars is both necessary and advisable. From the outset, literature must be searched in order to determine what is already known that is relevant to developing the content of the field. Annotated bibliographies on various aspects of population and the quality of life in relation to urbanization, the environment, employment, family life, and women's roles, to list but a few of the many subjects of interest, would greatly assist curriculum developers and teacher trainers. If educators are to maintain their obligation to tell the truth, then they must have ready access to that which is known. These bibliographies could also be used by scholars to assess the state of the art and to develop research maps for the future. Joe Wray's "Population Pressures on Families: Family Size and Child Spacing"* is but one example of what might be done.

This listing of needs and possible responses is only suggestive of the many areas of cooperation that are possible between APLIC and specialists in the field of population education. Further discussion and expansion of these and other ideas would be beneficial to all concerned.

*Reports on Population/Family Planning, Number 9, August 1971